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PAC-MAN
TOD FRYE ON HIS ATARI 2600 BESTSELLER AND BECOMING AN OVERNIGHT MILLIONAIRE
PLUS!
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BBC MICRO: KING OF THE CLONES
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ROB ANDERSON REVISITS HIS INSANELY VIOLENT AMIGA MASTERPIECE
AHOY THERE! IT'S GREGG MAYLES
THE RARE VETERAN CHARTS HIS COURSE FROM SABRE WULF TO SEA OF THIEVES
FUTURE
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THE RETROBATES

WHAT'S YOUR FAVOURITE PAC-MAN MEMORY?



DARRAN JONES

I remember standing on a bar stool to play *Pac-Man* whilst my dad was playing a gig. I would have been about nine. Classy…

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Einhänder

Favourite game of all time:
Strider



DREW SLEEP

I spent ages playing the *Pac-Man: Championship Edition* demo when I was a cash-strapped student. I love how bombastic and absurd the presentation is.

Expertise:
Making a fool of myself at *California Games*

Currently playing:
Bayonetta

Favourite game of all time:
Final Fantasy VIII



NICK THORPE

My first experience of *Pac-Man* was the Atari 2600 version – we picked it up for £1 from the market and since I didn't know better, I genuinely loved it.

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
Life Is Strange

Favourite game of all time:
Sonic The Hedgehog



SAM RIBBITS

Ermm… I guess discovering that there are better versions of *Pac-Man* than the original.

Expertise:
Stroopwafels and cheese

Currently playing:
Enter The Gungeon

Favourite game of all time:
Croc: Legend Of The Gobbos



JON WELLS

My actual favourite *Pac-Man* memory isn't mine, it's my mum's. It's literally the only game I've ever seen her play and enjoy!

Expertise:
Stealth-designing features while Sam travelled Europe

Currently playing:
Call of Duty: WWII

Favourite game of all time:
Super Mario World



GRAEME MASON

When I bought the grandstand *Pac-Man* tabletop game. Looking back, it was a terrible LCD-based version, but the unit itself was beautifully designed.

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Dragon Age: Inquisition

Favourite game of all time:
Resident Evil 4



MARTYN CARROLL

Discovering *Muncher*, Silversoft's very good clone, around 1983. It was one of the first games I ever played on the ZX Spectrum.

Expertise:
Sinclair stuff

Currently playing:
Zelda: Breath Of The Wild

Favourite game of all time:
Jet Set Willy



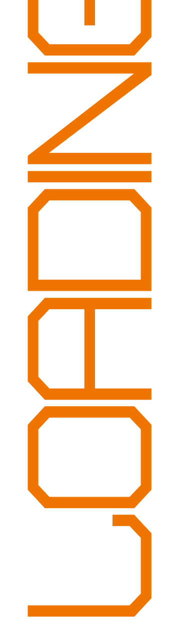
PAUL DRURY

Watching Jon Stoodley go for the 'perfect game' on the *Pac-Man* cab at Funspot arcade, USA, where Billy Mitchell had first achieved this feat. Made me proud to be British.

Expertise:
Crazy Taxi prequels

Currently playing:
Sky Diver

Favourite game of all time:
Sheep In Space



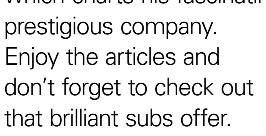
It's astonishing to think that *Pac-Man* has been entertaining gamers for nearly 40 years. My earliest memory of meeting the yellow pill muncher was in the very early Eighties when I would have been around eight or nine. It was mesmerising watching him rush around the screen, while trying to avoid the pesky ghosts and I must have wasted countless ten-pence pieces trying to get a high score.

I'm delighted then to reveal that we have two *Pac-Man* articles this month for you to enjoy. One looks at the short, difficult creation of the infamous Atari 2600 port of *Pac-Man* (which was the first version of the game I ever played outside of the arcades) while the other looks at the later isometric hit, *Pac-Mania*.

There's more to this issue than gobbling ghosts, however, and in addition to an amazing C64-based music CD and double-sided poster, we've also got a fantastic subs offer on page 30 where you can grab yourself a superb Venom headset. You'll also discover the making of *Aladdin* and *Moonstone*, as well as a fantastic ten-page interview with Rare's Gregg Mayles, which charts his fascinating career at the prestigious company.

Enjoy the articles and don't forget to check out that brilliant subs offer.

Enjoy the magazine!





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>> Load 179 Breathing new life into classic games



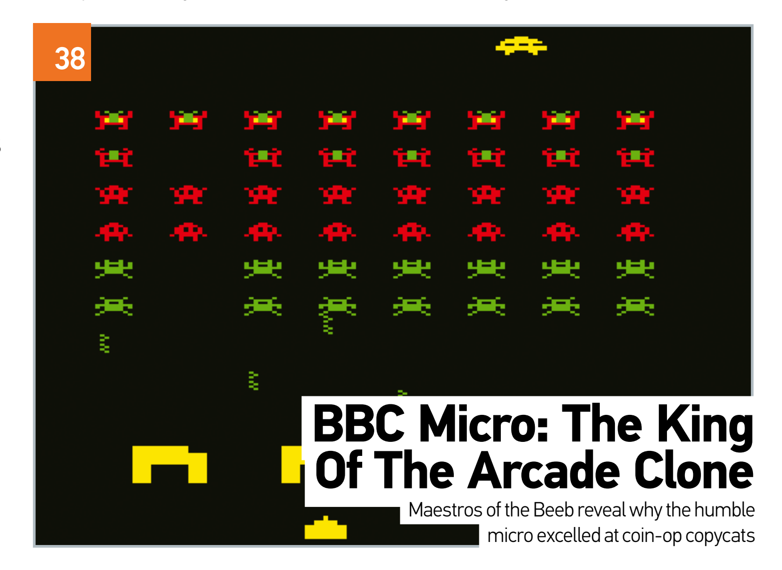
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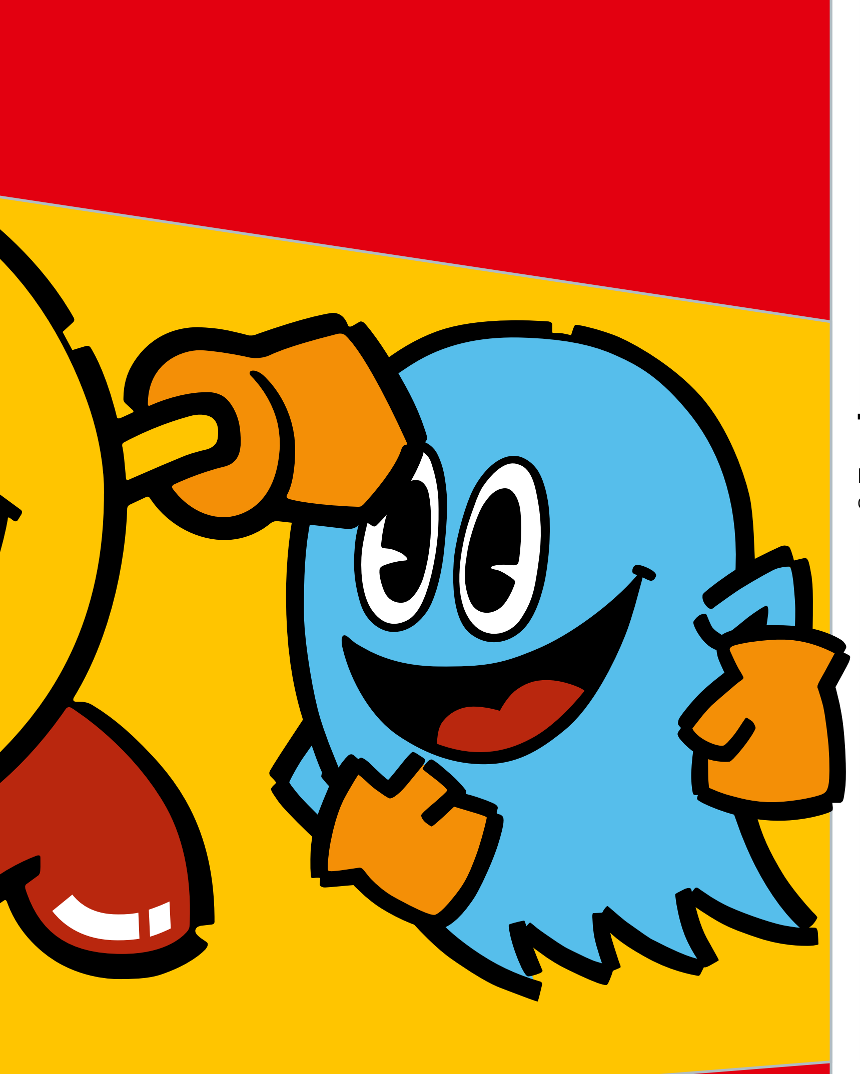

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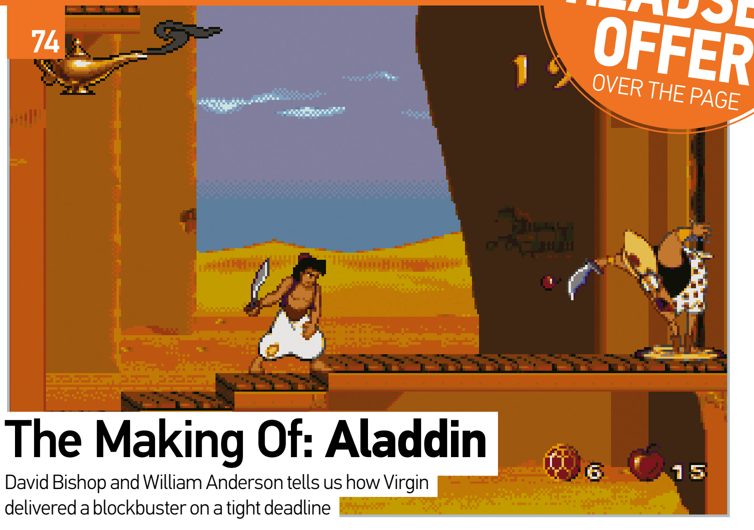

Retro Gamer Magazine


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OVER THE PAGE









REVIEWS

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PAUL WOAKES – A LEGEND PASSES

Developers pay tribute to the Novagen cofounder



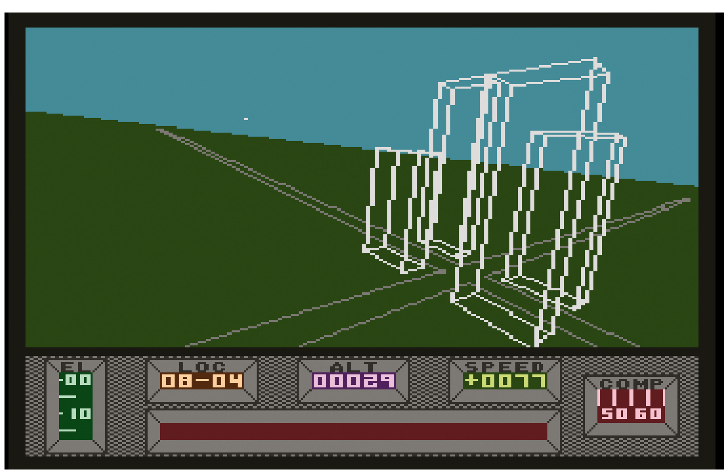
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The retro gaming community was shocked to learn of the surprise passing of the legendary 8-bit coder Paul Woakes, who passed away after a battle with a short illness.

Best known for his fantastic 8-bit hit *Mercenary* and its later 16-bit sequels, Paul was an incredibly private person who preferred to let his games do the talking and shied away from the public eye. He rarely appeared in interviews to talk about his work.

We were first notified about Paul's passing earlier in February when Just Add Water's Stewart Gilray mentioned the news via Facebook. It soon circulated on Twitter with many gamers passing on their condolences and discussing the impact that his games had on their lives growing up.

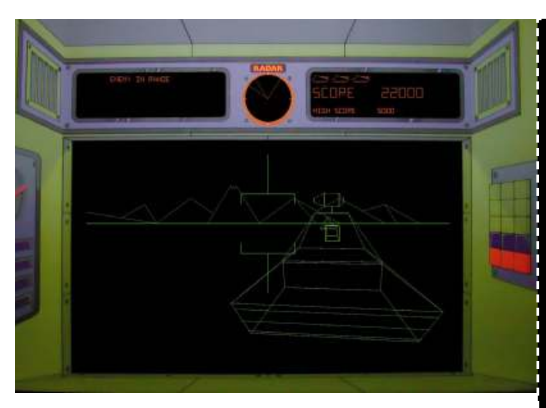
Stewart himself started off as a fan of Paul's work after discovering one of his early 16-bit games. "My first introduction to Novagen was with *Backlash* on the Atari ST, followed by *Mercenary* and then *Damocles*, except *Damocles* wasn't out then," he says. "Every time there was a new update, I'd ring up the Novagen offices and talk to Bruce Jordan about progress and if there was an ETA yet. I later found out that those calls meant a lot to them, so much so that my name was added to a list of ten located in the Novagen offices on Eris, they had put me in as Stuart Gill, but a conversation many years later with Bruce confirmed that it was meant to be me."



» [Atari 8-bit] *Mercenary* looked astonishing back in the day. We'd imagine many of you felt the same way.

Stewart's relationship with Novagen soon turned into a professional one and during the mid-Nineties he met with Paul, Bruce and Tim Bosher several times in order to hopefully sign the PC version of *Damocles*. "My last meeting with Paul was in April 2014," he recalls. "I met with him and Tim in Birmingham to discuss our [Just Add Water's] hope to remake *Damocles* for a PS4/Xbox One release. We spent hours talking about the original design docs, which contained extra gameplay and story ideas that they simply couldn't use due to memory limitations on the ST and Amiga. Paul

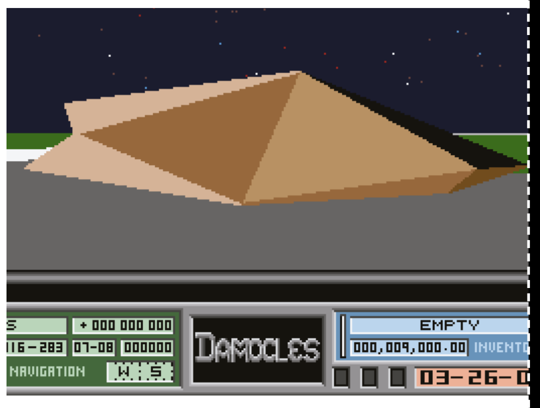
» [Atari ST] *Damocles* was released in 1990 and was the sequel to *Mercenary*.



» [Arcade] Paul was a big fan of *Battlezone*. He bought Jeff Minter's own cabinet.



» [Atari ST] Like *Mercenary*, *Damocles* pushed the hardware it appeared on.



» [Amiga] The success of *Mercenary* meant sequels followed, the first being *Damocles*.

showed us the original cover artwork for *Backlash*, *Encounter* and *Damocles*. I had spoken to him since on the phone a couple of times, and I was literally about to contact him and Tim about some ideas that I heard of his passing. Paul was a wonderfully original genius, I don't think there's many like him left."

Simon Berry used to work with Paul on his games, having created the music for *Backlash*, as well as contributing to *Damocles*, and he can still remember composing the memorable soundtrack. "The music for *Backlash* on the Atari ST was chiptune," he recalls. "Paul had sent me a Novaload disk for the Commodore 64 because at the time he was playing around with music. Then he sent an Atari ST three-channel music player bit of code he wrote that did a few burps and sputters. I then used one of those Casio handheld keyboards to work out a tune and a baseline. The third channel was 'drums' – aka white noise and such. I then had to create a load of assembly source code. I seem to remember it was all done with macros. Paul loved doing macros in K-SEKA (the assembler he used on the Atari ST). Here's the rub: I had 24 hours to do it! I received the code in the morning when I was in Swindon. By the evening I was on the phone to Paul and Bruce, playing the thing. They liked it, although Paul was complaining about the quality of the telephone line! So I sent it by Red Star (British Rail delivery) to Birmingham and that was that."

One of the few images of Paul which circulated the internet on the news of his death was with him sitting next to Archer Maclean and Jeff Minter in 2002. Jeff can still recall his first encounter with Paul, who instantly impressed him with his amazing games. "Paul was a pretty private guy but he was always very kind to us," he recalls. "The first time I met him was at an exhibition when he came up to us on our stand and wanted to show us a game he'd made. He gave us a tape to load into our Atari and it was *Encounter*. I was completely blown away by it, I remember telling him it was the best thing I'd seen since *Star Raiders* (and I fucking loved *Star Raiders*). His reinterpretation of the *Battlezone* idea was nothing short of amazing, fluid 60hz gameplay with these massive objects on screen, I'd never seen anything like it. I asked him how the hell he'd done it and he wouldn't tell me, which was fair enough. I actually sold him my *Battlezone* machine," Jeff continues. "I had one of the smaller *Battlezone* cabs as opposed to the huge ones with the periscope style viewing window. Good thing too as he came down to collect it in a Mini Metro hatchback. It just barely fit in."

Paul Woakes may have been a private man but his talent clearly affected those who knew him and the legacy he leaves behind is testament to his technical creativity who was as accomplished as he was private. "I remember Paul as a quiet genius, never really seeking out any publicity for himself, but every now and again coming out with works of absolute genius that really exercised the machines they ran on to beyond what most of us thought their limits were," concludes Jeff. "*Encounter* was arguably better than the arcade game that inspired it, *Mercenary* and *Damocles* prefigured open-world gameplay on machines that you wouldn't think could possibly sustain such things. Some of the best games of their era without a doubt.

"I was gutted to hear that he'd passed. I'll remember him as a quiet and gentle dude with some outstanding technical skills who made games that were way ahead of their time and which a generation of us remember as some of the best around."

Our thoughts go out to Paul's family and friends. ✱

READERS REMEMBER PAUL WOAKES

I picked up *Mercenary* pretty much on the day it came out, the reviews had been smashing, but somewhat confusing. I don't think I really understood how it worked. Soon as you crash land you are transported to a complete and real world, the vectors may be transparent, but in my head I could see it all. It was a complete and real world. Such pleasure was given, yet I have never have seen an interview or even a photo of Paul Woakes, but he will forever be in my dreams.
Back In Time Sime

That his games are still technically impressive in terms of scale is amazing. Some of us like exploring an open world and having a lot of freedom and he was one of the first programmers to make that possible.
Michael Reed

Good old *C&VG* had some well-connected sources and so the team produced a real early report on *Mercenary* that forever established its mythic status. It didn't hurt the Atari image either, he was obviously fond of it. A man that could think out of the box and who will be sorely missed.
NorthWay

So sorry to hear of his passing. I whiled away countless hours in *Mercenary* on the ZX Spectrum. It felt like a living world in how you could receive messages from the inhabitants of the city, and could be chased for stealing a ship or shooting down some of the structures. And all in slick 3D. Daredevil flying under bridges, exploring underground complexes and flying up to the base in the sky to explore more. I used to walk home from school looking forward to playing it again.
Graham Plowman

So sad to hear. This is why media like **Retro Gamer** is so important to document and celebrate the legends like Paul and their work. I remember being transfixed by Backlash when I saw it running on an Amiga.
Anthony Bull

THE DOCTOR WILL SEE YOU NOW

THE COFOUNDERS OF TWO POINT STUDIOS CHECK IN WITH THEIR LOVE LETTER TO THEME HOSPITAL



» [PC] Early footage suggests that the team has easily captured the humour that was so prevalent in *Theme Hospital*.

» (Top left) Ben Hymers, Gary Carr (top right) and Mark Webley (bottom) are hoping retro fans will enjoy their modern take on a classic game.



» [PC] It will look instantly familiar to fans of *Theme Hospital*, but *Two Point Hospital* is very much its own game..

> "If we get any drama reflected on our game, I think it would be positive"
> Mark Webley

Bullfrog's *Theme Hospital* was a big deal in the late Nineties, appearing on PC and later PlayStation and garnering a cult following. Two ex-members of Bullfrog, Gary Carr and Mark Webley have now formed a new company, Two Point Studios, along with Ben Hymers and their first release is an obvious tribute to the classic Bullfrog game. We made an appointment to learn more.

How does it feel making a spiritual successor to *Theme Hospital* after all these years?
Gary Carr: Never felt better! It really feels like we are making something that we are all very passionate about. It feels very natural and instinctive to be doing this right now.

What benefits does the isometric viewpoint offer?
Ben Hymers: It's not actually isometric! It's a perspective camera with a very narrow field of view (about 17 degrees or so), positioned quite a long way away. We felt that gave us the best of both worlds. It looks almost isometric which gives a 'retro' feel, but it still gives you depth cues so you can intuitively get a feel for the sizes and distances of things in the world.

Have you learnt any lessons from working on the original *Theme Hospital*? How is *Two Point Hospital* going to compare?
Mark Webley: Well, we've had 20-odd years making games since then, so hopefully we've learned something! We are also working with a really smart and talented team, when it was largely Gary and I making all the decisions back then. I think the game was really hard back then, and whilst a challenge isn't a bad thing, it did mean that you could easily hit a brick wall and not get any further. I am not sure how many people completed the game and saw the final videos and the game credits!

Will any of the earlier ailments return or are they all new ones?
GC: We have come up with a whole bunch of new illnesses. We really wanted to try and leave *Theme Hospital* alone for all sorts of reasons, and we had so long to riff on new ideas it wasn't difficult to move on and come up with a whole load of new features and weird and wonderful afflictions, and, of course, ways to cure the peeps.

There's a lot of drama surrounding the NHS currently, are you concerned this might reflect on your game?
MW: When Gary and I made *Theme Hospital* 20-odd years ago there was a lot of controversy around the NHS then too, so not much has changed, in that regard. We had some criticisms that we were making a sick game that was offensive to NHS staff who were doing a great job as best as they could and I even went on the radio to defend the game – the criticisms were from people that hadn't even played the game. If we get any drama reflected on our game, I think it would be positive!

Will you be able to over-inflate an avatar of Jeremy Hunt?
MW: One of the VIP Health Inspectors may bear a resemblance! He thinks everything is fine and there's nothing to worry about, but he'll cut your funding anyway! We're based in Farnham and Jeremy Hunt is our local MP.

***Two-Point Hospital* is scheduled to release this year. Keep your eyes peeled in RG for a review.**

Here's my bio… Paul Rose
Paul Rose is probably better known as Mr Biffo – the creator and chief writer of legendary teletext games magazine *Digitiser.* These days, he mostly writes for kids TV, but can still be found rambling on about games, old and new, for his daily website, Digitiser2000.com.

We are legion

I recently attended a concert by the Fifties-style rock'n'roll band The Jets. It's not the sort of gig I'd typically be seen at – my tastes tend to tip towards the proggier end of the musical spectrum – but the band were playing near my house, and a mate had invited me.

It wasn't what I'd expected. In fact, I don't know what I'd expected, but the shows I tend to go to feature a lot of bald middle-aged men clutching pints, and nodding occasionally. This was completely different. There were a lot of people dressed up like it was still the Fifties; guys with hair slicked back into quiffs, women in big, flowery dresses and petticoats, or dressed like land girls. Most startling of all was the dancefloor. Instead of everyone being crammed into the available space, shoulder-to-shoulder, there was an area reserved in front of the stage for people who actually wanted to dance. And dance they did, groups of people in seemingly choreographed lines, or couples spinning one another around. It might not have been my cup of tea musically, but I can't pretend I wasn't swept up in the atmosphere.

What it did make me consider, however, were the parallels to the retro gaming community. By the time you'll have read this, I'd have paid a visit to Play Expo in Blackpool. Whenever I've attended these sorts of events, I've always been struck by the sense of community.

There's something special about knowing you're in a room full of people with the same interests as you. If you get into a conversation there's no pressure to make small talk; you already know what the talk is going to be about. There's a communal passion for old-school gaming, and that immediately creates a connection between the people around you.

To borrow a phrase that gets thrown around a lot these days – with both negative and positive connotations – it's a safe space, where retro gamers can be themselves. You know: just like there are places, as I've discovered, where people can pretend it's still 1953 and Bill Haley is rocking the charts.

Too often this hobby is something to hide away. Your collection of vintage consoles is not a subject you'd bring up in a job interview or on a first date. Probably not even a second date. It's the sort of thing that the not-we-s don't understand. If you weren't into the games first time around then you're not going to get why we still love them.

The way the retro community has grown and flourished in the years since this magazine began is a truly wonderful thing. We don't have to feel embarrassed. We now know there are millions of people out there just like us. And, best of all, there are places we can visit where we can wallow among them in a shared passion for yellowing Super Nintendos and pixels, where mention of Wally Week won't be met with a frown. *

> "There's a communal passion for old-school gaming"

Do you agree with Paul's thoughts? Contact us at:

 RetroGamerUK  @RetroGamer_Mag  darran.jones@futurenet.com



The Legend of Final Fantasy VII

This helpful tome covers all aspects from the *Final Fantasy VII*, subseries from *Crisis Core*, to *Dirge Of Cerberus*, exploring the series' themes, mythos and creation. However, this is analysis from the authors only; there's not much in the ways of original developer anecdotes. It's a weighty book, with good paper stock and a nice minimalistic hardback cover. It's sure to light up the Materia of any *Final Fantasy VII* fan. And perhaps it's the ideal artefact to get you ready for the up-and-coming remake.

Price: $29.90 **From:** www.thirdeditions.com

Data East Classic Collection (PAL Version)

This officially licensed five-in-one cartridge offers a quintet of Data East classics – *Fighter's History*, *Fighter's History 2*, *Side Pocket*, *Magical Drop* and *Magical Drop II*. It comes in an authentic SNES-style box, with a handful of small extras like a pair of buttons and stickers. The five games on offer are sure to keep you happy for a good while – we're always partial to a round of *Magical Drop*, for example. We will throw a warning our there, though: this cartridge isn't compatible with emulator-based consoles such as the Retron 5 or Retro Freak.

Price: £28
From: amazon.co.uk

PICK OF THE MONTH

NES30 Arcade Stick

While the Switch has built up a library of decent arcade games, from SNK classics to shoot-'em-ups, playing with the Joy-Cons is perhaps not the best way to experience them. The NES-themed NES30 is here to help, and it works fantastically with Nintendo's home console-handheld hybrid. That said, you might look a little odd pulling this out on a bus, though.

Price: £65 **From:** www.8bitdo.com

Expedition

This is an easy-to-pick-up card game that uses the power of your NES to display its interface – which is ideal for those of you who have a retro-focused game room. The card game itself is fine enough, however the screen presentation for the NES version could be better. We found text erred on the illegible side, and would probably recommend ditching the 8-bit version in favour of *Expedition*'s app, available on iOS or Android.

Price: $75 **From:** https://megacatstudios.com

Official PlayStation Socks

It's a well-known fact that we don't pay enough attention to our socks. Most of you, we're willing to bet, are wearing regular old solid-colour foot gloves. Or maybe the more adventurous of you have stripes or something – you crazy cats. Well, why not retro-charge your feet with these PlayStation socks? Tastefully patterned with the iconic shapes and logos of Sony's console, they'll keep your feet warm and your style super chill.

Price: £7.00
From: www.insertcoinclothing.com

BACK TO THE NOUGHTIES

MARCH 2001 – Sega's intentions as a third-party developer are revealed, Konami delivers a great PS2 game and Jeff Minter backs another hardware winner. Join Nick Thorpe for a trip back in time to the age of Napster...



NEWS MARCH 2001

Just after midnight on 4 March, a car bomb exploded outside the BBC Television Centre in London, seriously injuring one person. Staff had been evacuated following a coded warning message, and police were trying to perform a controlled explosion. The attack was linked to a series of bombings by a dissident Irish republican paramilitary group, the Real IRA.

The Russian space station Mir was disposed of on 23 March, re-entering the atmosphere and burning up over the South Pacific. The station had been a pioneering work when launched by the Soviet Union in 1986 – it was the world's first modular space station, and eventually became the first to be continuously inhabited for a long period of time.

Also on 23 March, the World Wrestling Federation purchased its long-time rival World Championship Wrestling from AOL Time Warner. WCW had been the dominant force in the business from 1996 to 1998, drawing higher TV ratings. However, the company had failed to create new stars and storyline quality sharply fell during 1999. The WWF picked up contracts for 20 WCW wrestlers including Booker T and Diamond Dallas Page for an undisclosed sum, and acquired the trademarks and tape library for just $4.2 million – less than the annual salary WCW was paying its top stars like Hulk Hogan and Goldberg.



[Dreamcast] Despite Sega's fortunes, the luxury of the first online RPG on consoles was exclusive to Dreamcast owners.

THE LATEST NEWS FROM MARCH 2001

The fallout continued from Sega's console market exit, with *Edge* providing a blow-by-blow account of the week of the announcement, beginning with an oddly lavish preview event for *Shenmue: The Movie* and *Shenmue II*, where the expected announcement of a release date for the latter didn't actually materialise. The final announcement of leaving the hardware market was then made, with most parties warmly welcoming the move.



[PC] In the age of free mods, a slightly sparse package like *Quake III: Team Arena* didn't quite cut it.

Criterion's Alex Ward described it as "just fantastic news" and Free Radical's Steve Ellis was "glad to see that Sega intend to continue developing software". However, not everyone was thrilled. In particular, *Edge* noted that, "Some perceive Sega Japan's manoeuvrings as a stab in the back to its overseas representatives," and that the feeling amongst third-party PS2 developers was that "as a software-only company Sega is a new danger". Japanese TV journalists framed the issue as being about a lack of great games on the Dreamcast, as compared to the PS2. Interestingly, Chris Kingsley of Rebellion said that he "wouldn't be at all surprised if they have some new, cool console waiting in the wings".

Space Channel 5 and its forthcoming sequel, a new *Sakura Taisen* and *Virtua Fighter 4* were all announced as being PS2-bound, and vague rumblings of cheap PlayStation releases were also being heard. Sonic Advance was confirmed for Game Boy Advance, with Sonic Team in general considered to be Nintendo-oriented. No projects were yet announced for the GameCube or Xbox, but with no exclusivity deals announced, it could only be a matter of time.

Of course, the Dreamcast still had some life left in it, as the phenomenal *Phantasy Star Online* proved. It was a groundbreaking moment for console gaming – a full 3D co-op RPG, playable online via the humble dial-up modem. *Edge* praised the game with a 9/10 review and stated that, "Atmospherically, *Phantasy Star Online* is without rival." *CVG* awarded it the full five stars, noting that, "Our only concern is that players may be put off by the call charges." Less impressive was the month's other major Dreamcast release, *Vanishing Point*. Clockwork Games' racer scored an average three stars from CVG and a damning 3/10 from *Edge*.

The most notable PS2 release of the month was Konami's *Shadow Of Memories*, an adventure puzzle game in which you control Eike Kusch, who

THIS MONTH IN…



N64

"Don't listen to 'em!" exhorted editor Andrea Ball, referring to people's claims that the N64 was "slumped at death's door". The proof? Upcoming games including *Star Wars: Battle For Naboo*, *Indiana Jones And The Infernal Machine*, and *Dr Mario 64*. Of course, two of those would never make it to the UK.



Edge

A trip to see new arcade games at ATEI left *Edge* uninspired. The magazine commended Sega and Konami's offerings, but concluded, "Away from these two, there was little that was either genuinely new or overwhelmingly original," and lambasted companies such as Namco for a "lightgun fixation".



PC Zone

100 issues in, the team has earned the right to a self-indulgent look back at the history of the magazine. Highlights include the 'turd in a pretty bow' a news story on *Frontier: First Encounters*, an early *Euro 96* review that had to be retracted, and, of course, Charlie Brooker's infamous 'Cruelty Zoo' cartoon.



[PS2] Sega wasn't just bringing Dreamcast games to PS2 – major developments like *Virtua Fighter 4* were incoming.



[N64] *Pokémon Puzzle League* was indeed great, but how much longer could the N64 limp on?

travels through time in order to prevent his own murder and unmask the culprit. The game garnered widespread critical acclaim, including scores of 8/10 from the *Official PlayStation 2 Magazine* and 85% from *Play*. *CVG*'s Johnny Minkley gave a five-star review, saying that it was "genuinely refreshing to see a title with such an intelligent, involving and beautifully structured storyline". *Edge* wasn't as impressed however, giving it just 4/10 and describing it as, "A puppet show that offers little audience interaction." Other notable PS2 games for the month included *Oni* (72% *Play*, 7/10 *Official PS2*) and *7 Blades* (6/10 *Official PS2*, 4/10 *Edge*).

On the older PlayStation, *Fear Effect 2: Retro Helix* was the flavour of the month. Like the original, it offered stylish visuals and a compelling adventure. Unlike the original, it had a major emphasis on the sexual appeal of protagonists Hana and Rain, whose intimate interactions were heavily touted in adverts. *Play* felt that the game's content "may not be beneficial to females, and totally manipulative of males", while *Edge* noted that the sexualised scenes were "less intrusive than expected" and that "in terms of a relatively sympathetic portrayal of a homosexual lead character, *Retro Helix* may be something of a first." Though overshadowed by this debate, the game was actually an improvement on its predecessor, earning five stars from *CVG*, 85% from *Play* and 6/10 from *Edge*. Elsewhere, *ISS Pro Evolution 2* continued Konami's fine football series, earning 10/10 from *Official PS2 Magazine* and five stars from *CVG*. Additionally, *Point Blank 3* (82% *Play*, 6/10 *Official PS2*) and *C-12: Final Resistance* (5/10 *Edge*) hit the shelves.

Over on the PC, the big news was the launch of *Quake III: Team Arena*, an expansion with new team-focused modes, a few new weapons and some additional maps. *CVG* felt that it "doesn't offer enough to justify the £20 price tag" and gave it three stars, a sentiment *PC Zone* agreed with – the 61% review in that magazine claiming that the expansion "does nothing to enrich the lives of existing *Quake* players". And it was a torrid time to be a Nintendo fan – the only UK N64 releases of note were *Pokémon Puzzle League*, a *Panel De Pon* update (89% *N64*) and the dreadful *Power Rangers Lightspeed Rescue* (9% *N64*). On the Game Boy Color, the only standout was *Mr Driller* (3/5, *N64*).

The most unexpected high scorer of the month wasn't released on any



[PlayStation] *Fear Effect 2* delivered more of what made the first game fun, and fixed a few problems.

of the usual suspects, though – it was exclusive to Nuon-equipped DVD players. *Tempest 3000* was Jeff Minter's latest take on the classic Atari coin-op, and *Edge* was thrilled with it, awarding it 9/10 and saying that, "It's not uncommon to find a couple of hours have suddenly elapsed over what seemed like only a few minutes." However, in a feature on the Nuon technology, *Edge* noted that other software "doesn't look too enticing" and concluded its analysis on the Nuon by saying that it "wouldn't try to convince you that the Nuon is a viable gaming platform". Ouch. *



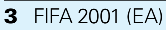
MARCH 2001

PLAYSTATION 2

1 SSX (EA)
2 Tekken Tag Tournament (SCEE)
3 FIFA 2001 (EA)
4 Timesplitters (Eidos)
5 Ridge Racer V (SCEE)

PLAYSTATION

1 Who Wants To Be A Millionaire? (Eidos)
2 WWF Smackdown 2 (THQ)
3 FIFA 2001 (EA)
4 The World Is Not Enough (EA)
5 Ronaldo V-Football (Infogrames)



PC

1 Who Wants To Be A Millionaire? (Eidos)
2 Championship Manager 00/01 (Eidos)
3 The Sims (EA)
4 The Sims: Livin' It Up (EA)
5 Command & Conquer: Red Alert 2 (EA)

MUSIC

1 Pure And Simple (Hear'Say)
2 It Wasn't Me (Shaggy feat Rikrok)
3 Uptown Girl (Westlife)
4 Whole Again (Atomic Kitten)
5 Mr Writer (Stereophonics)

Space Taxi

LET'S MAKE SOME CRAZY MONEY!

» RETROREVIVAL



» COMMODORE 64 » 1984 » MUSE

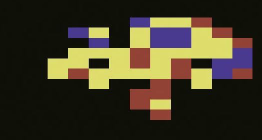
I've noted before in these pages how Interceptor Micro's *Siren City* is like a primitive iteration of *Grand Theft Auto* and here is another early Eighties C64 game which could be seen as the spiritual ancestor to a big hit in the Nineties.

Space Taxi casts you as a futuristic cabbie, picking up fares and delivering them to their destinations whilst negotiating laser fire sprouting beanstalks, black holes and giant games of ping pong. If Sega's *Crazy Taxi* isn't quite crazy enough for you, you should try this.

The 24 screens, one for each hour of an especially long and demanding cabbie shift, are not only wildly varied, there are lots of smile-inducing nods to other games of the era. *Taxi Maze* resembles *Super Sprint* played in zero gravity and *Shift-O-Rama* riffs on *Frogger*. Shooting Stars presents you with a classic *Lunar Lander* setup and there is a *Jumping Jack* feel to *Electroids*, as you carefully navigate gaps in an array of force fields.

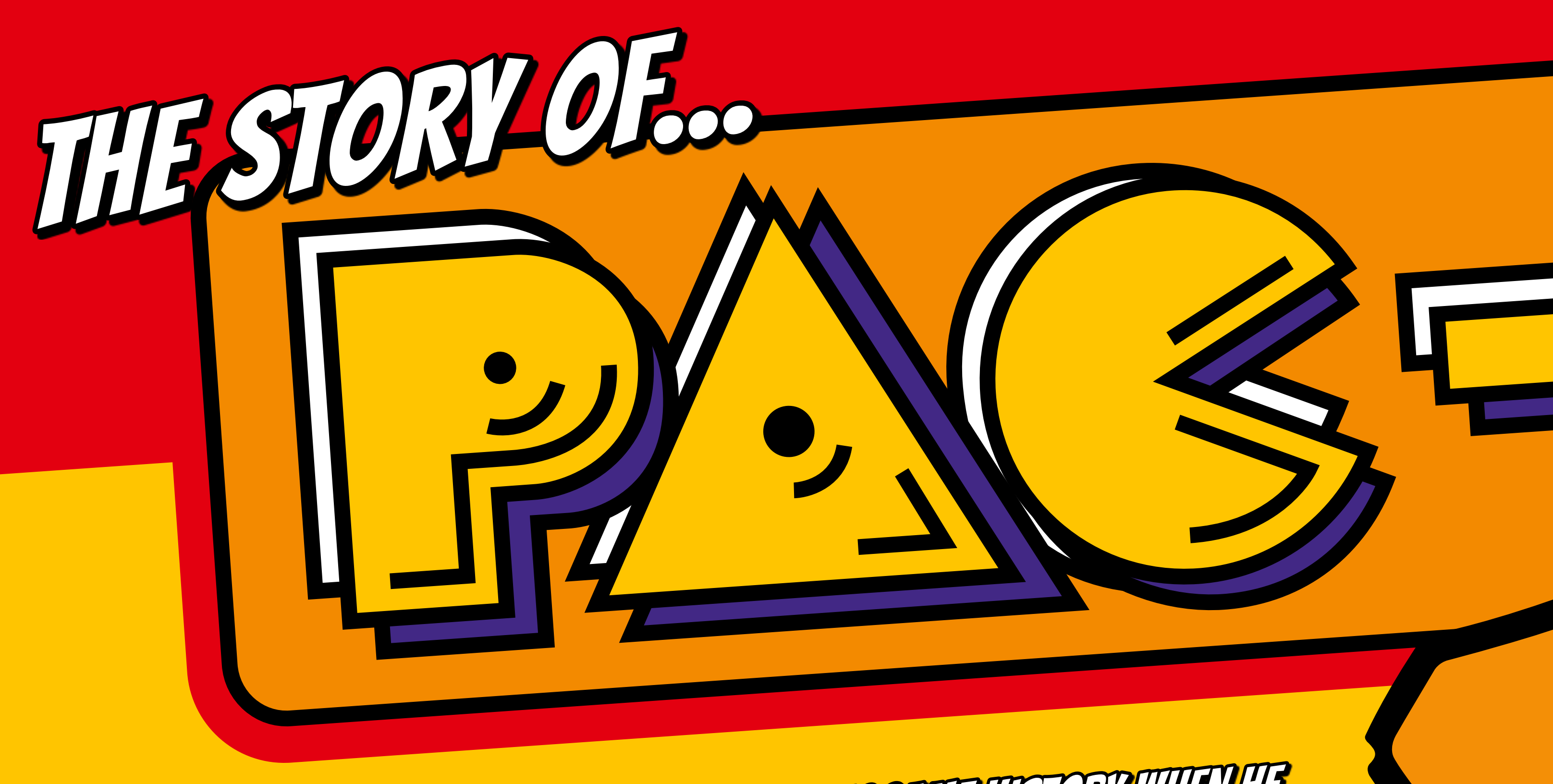
It's a tough game, undoubtedly, requiring brainwork as well as dexterity. Just managing your fuel reserves and coping with the inertia caused by your thrust is challenging enough without the myriad obstacles and fiendish level design. There is a tangible sense of relief when your next customer, summoning you with a gruff 'Hey, Taxi' (my second favourite use of speech on the C64 after *Impossible Mission*'s 'Stay Awhile'), lollops into the back of your cab and says, 'Up, please', meaning your work is finally done and you can progress to the next surreal scenario.

There's even a secret level to discover, and a charming end screen, though if you make it that far you're a better chauffeur than I am. If you need any more encouragement to try this often overlooked title, Jeff Minter named it as his favourite game during the 'Spectrum Versus C64' debate held a few years back at Play Expo. Recommendations don't come much higher. *





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1:00
TAXI!
$ 14.00



PROGRAMMER TOD FRYE MADE VIDEOGAME HISTORY WHEN HE DESIGNED THE ATARI 2600 VERSION OF PAC-MAN. BUT NEARLY 40 YEARS LATER, THAT INTENSE EXPERIENCE, THE GAME'S RECEPTION AND GHOSTS OF THE PAST ARE STILL CHASING HIM

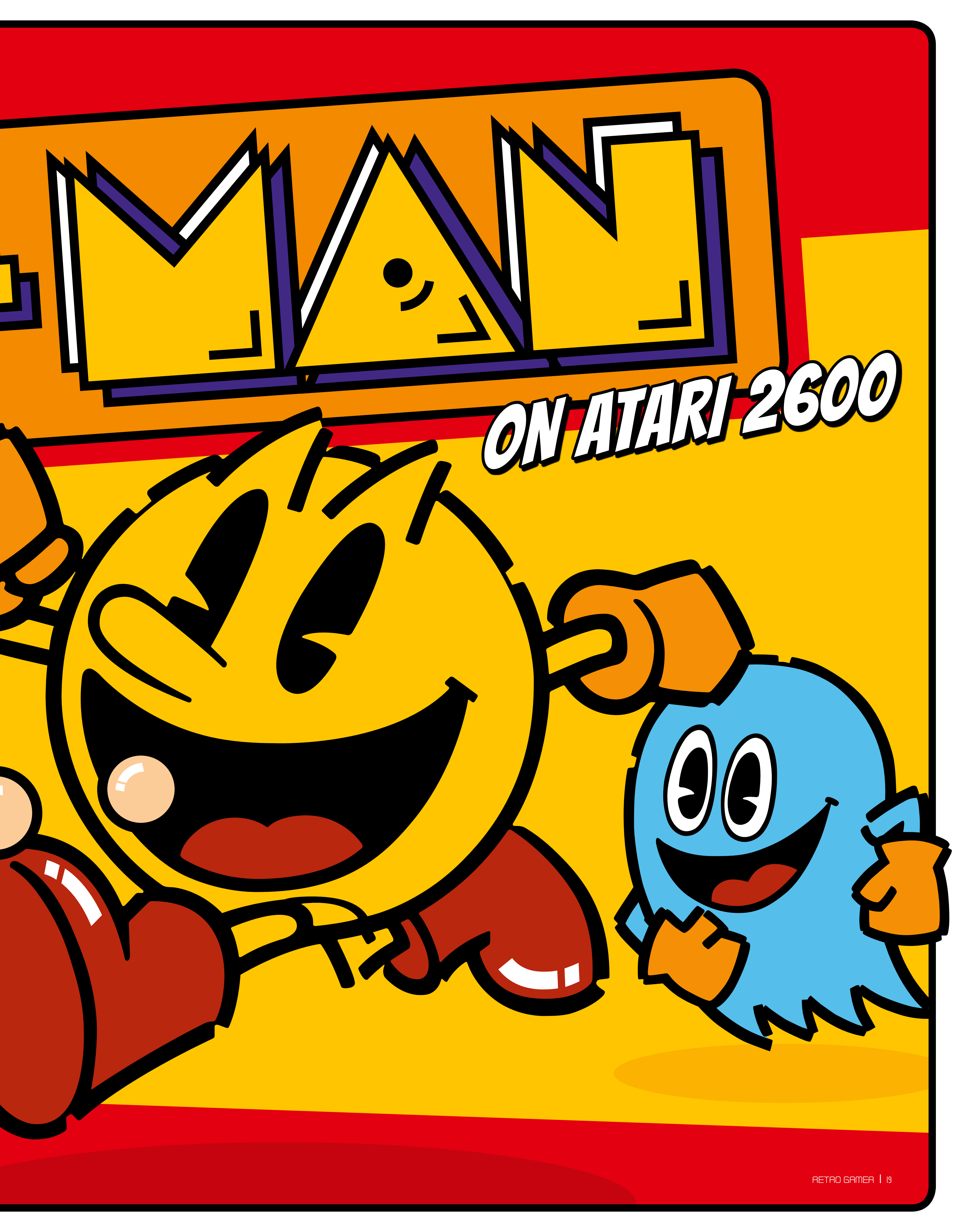
In early 1981, Atari assigned a brilliant, formerly homeless, high school dropout to one of its most important games ever – the home version of its mega-hit *Pac-Man*.

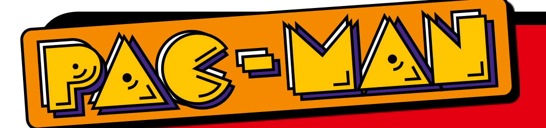
Pac-Man's pop culture invasion began a year earlier, when an army of little yellow dot-munchers stormed the arcades, pool halls and convenience stores of America. The wildly-popular arcade game smashed demographic barriers around the world with its approachable, non-violent game design. Players of all ages and walks of life were drawn to one of the first character-based videogames. *Pac-Man* was a genuine phenomenon, selling an estimated 400,000 cabinets worldwide. The game also spawned a merchandising bonanza, with the character's image emblazoned on bedsheets, drinking glasses, T-shirts, stickers, cereal, a Saturday-morning cartoon, and even a pop single.

Atari was betting gamers would play *Pac-Man* at home, too, when it acquired the home videogame rights from *Pac-Man*'s parent company Namco. The arcade game's popularity guaranteed that it would come to living rooms on the popular Atari 2600, the home console.

The job fell to programmer Tod Frye, who was regarded as a brilliant, but undisciplined, software engineer at Atari. In high school, he cut classes – hiding in a closet to smoke pot and program on a Wang 3300 computer to produce a text-based adventure game with the player cast in the role of drug dealer. "I wasn't drawn to athletics," he remembers. "I wasn't drawn to acting. I was drawn to programming. It just found me." Tod could look at code and see "a problem to be fixed", and writing code offered him "a godlike power to make things right, to bring order to chaos – to create something that wasn't going to be there if you didn't make it". ▶

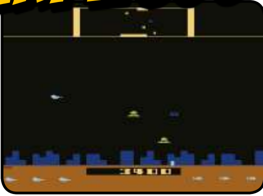
» The Atari 2600 was no stranger to big arcade ports, thanks to releases like *Space Invaders*.


MAN
ON ATARI 2600



10 Other Atari 2600 Arcade Ports











Space Invaders

■ This translation of the monumentally popular arcade game was instrumental in resuscitating the struggling Atari 2600 in 1980, turning this timely port into the industry's very first killer app. *Space Invaders* at home was a strong port of the original that made Atari's first home console a huge success.

Defender

■ While this port has been maligned in some circles for its simplified game design, programmer Bob Polaro did a yeoman's work in reinterpreting the complex arcade controls for the Atari 2600's single-button joystick. While it's not as difficult as its arcade predecessor, it captures the original's essence well.

Missile Command

■ Atari's apocalyptic arcade game was translated beautifully for the Atari 2600, despite cutting some of its bells and whistles. It removes the final, haunting mushroom cloud and ominous 'The End' titles of the game's finale, but otherwise captures the zeitgeist from the original Cold War-era classic.

Jungle Hunt

■ This vine-swinging adventure game stacks up well, even to another jungle-themed classic such as *Pitfall!*. *Jungle Hunt* on the Atari 2600 tightly reproduces the four unique game screens of the arcade original in a way Atari's home console can handle, even with the inclusion of some subtle parallax scrolling.

Crystal Castles

■ The eye-popping isometric maze graphics and animation of the arcade game are missing, but the game plays well even in its slimmed-down version. The mazes are unique and the game plays fast and fun, especially if you can replicate the arcade feel with the console's separate Trak-Ball controller.



Creating Pac-Man

The differences between arcade and 2600 Pac-Man

Maze and dots

The 2600's graphics limited the number of dots on screen, and increased their minimum size. Atari compensated by calling them "video wafers" in the game manual. The vertical maze orientation had to change to fill the more horizontal 4:3 ratio of vintage televisions.

Character animations

To conserve memory, Tod simplified animations, removing details like Pac-Man's vertical rotation, and the more complicated ghost animation, which had to be condensed into two-frame animations for the 2600.

Flicker

Tod utilised a flicker technique that strobed the ghost character graphics so that all four appeared on-screen at once – something that had never been done on the 2600 before. He also justified this approach, noting that the ghosts were ephemeral spirits. Though the method was successful, players complained about the constant flicker. Atari grilled Tod about it after the game's release. Tod explained that the 4K memory prevented him from using a solution other than flicker. Not coincidentally, *Pac-Man* was the last of Atari's 4K games.

Maze colors

The Atari 2600 version of *Pac-Man* includes maze colours that do not match those of the original arcade game, which was a sore point for fans. The colours were Tod Frye's own decision. "What I think is really interesting about that is that no one knew that a necessary part of the *Pac-Man* signature was the colours," he says. "And it's easy for people to say, 'Oh, it was obvious!' But you know what? It clearly was not obvious."

Arcade sound

The delicate 'waka waka' eating sounds of the arcade *Pac-Man* were replaced with the blunt bonking sounds generated by the 2600's primitive sound chip. The urgent, jarring siren background sound was absent altogether.

Two-player gameplay

Later adaptations of *Pac-Man* and *Ms Pac-Man* dropped the option of two-player gameplay, a feature that Tod Frye refused to eliminate. The decision would have saved him precious bytes to utilise elsewhere, but he deemed it essential in capturing the spirit of the original.

Fruit vs vitamins

Arcade *Pac-Man*'s levels are often designated by the different fruit – cherry, strawberry, orange and the rest. The bonus fruit are worth varying point totals, but had to be eliminated from the Atari 2600 version because of memory constraints. In their place, Tod used a rectangle within a rectangle shape, which Atari's manual writers dubbed a 'vitamin'.

Cutscenes

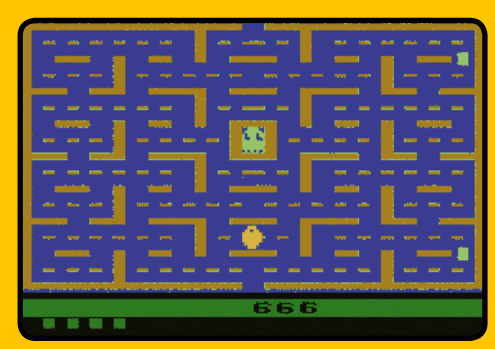
A unique storytelling aspect of *Pac-Man* was excised when the game translated from arcade to the 2600 home console. The whimsical animated interludes, a fun and brief respite from the fast-paced game itself, were removed to preserve memory for the crucial gameplay.



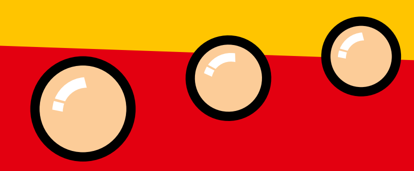
▶ Tod dropped out of high school in his junior year, and his father kicked him out of the house. Rebellious and homeless on the streets of Berkeley, he panhandled until finding work on a construction crew, eventually becoming a master carpenter. Later, a high-school friend helped him get an interview at Atari, and Tod returned to the only calling that had captivated him. He began work as a game programmer in 1979, at one of Silicon Valley's hottest companies.

His initial projects included a handheld *Breakout* game and the Atari 400/800 version of *Asteroids*. Like many others, he enjoyed the freewheeling culture of Atari, where employees mixed the business of game programming with chemical pleasure. On fellow programmer Howard Warshaw's first day, Tod introduced himself by lighting up a joint in his office and inviting Howard to smoke with him – only "the good stuff".

Tod also showcased his oddball side. He earned the nickname of 'Arfman' for barking like a dog as he roamed the halls. The tall programmer would literally scale Atari's walls, too, placing a foot on each wall of the narrow hallways of the company's Sunnyvale headquarters, then cantilevering his way down the corridors several feet off the ground.



» [Atari 2600] The 2600's maze was created using blockier, lower-resolution 'playfield graphics' mirrored across the vertical axis.





TRACK & FIELD

■ Atari preserved the fast-paced experience of this Konami classic on the 2600. The game challenging both with the standard joystick, and using the pack-in arcade style controller. Much like its excellent Olympic cousin, *Decathlon*, *Track & Field* is as physically demanding as a classic console game gets.



DOUBLE DRAGON

■ Credit to programmer Dan Kitchen for even attempting this popular arcade game near the end of the 2600's lifespan. It has two-player action and multiple levels, but the game is crushingly difficult because its crucial special moves have been distilled into awkward combos on the 2600's single-button joystick.



RAMPAGE

■ Some arcade translations are too ambitious for their own good, and this particular Atari 2600 port sheds too much of the original's charm. In trying to preserve *Rampage*'s signature two-player mayhem, the 2600 conversion falters with poor collision detection issues and a weak graphical style.



CENTIPEDE

■ Atari managed to capture the frenetic pace of the arcade in this Atari 2600 counterpart, and it plays even better with Atari's Trak-Ball controller. The graphics are a significant step backward from the arcade original, but the pure and compelling gameplay almost makes up for that loss.



STAR WARS: THE ARCADE GAME

■ It's almost shocking how well this iconic space shooter looks and feels on the Atari 2600. The colour vector graphics and immersive cockpit cabinet are missing, of course, but the 2600 does a fine job of replicating the dogfights and trench run from the arcade original.

"THE EFFORT WAS TO CATCH THE ESSENTIAL FEELING, THE ETHOS, THE SPIRIT – THE SOUL OF PAC-MAN"

TOD FRYE

» [Atari 2600] Tod's *Pac-Man* added an eye for the onscreen character before any other game had done so. Call it a wink.

His wall-walking habit ended abruptly when he smacked a ceiling-mounted sprinkler with his forehead, requiring 23 stitches.

With talent and quirkiness to burn, Tod appeared to be a perfect match for Atari. But during a crucial review, Tod's boss suggested that he wasn't fitting in well – and should consider looking for another job. "He said, 'Look, you're probably a real good programmer, but you're not putting out,'" Tod recalls. The conversation stunned the young game designer and left a lasting impression. He smoked one more joint, and threw up. Tod then went completely sober for almost a year while working on *Pac-Man*. The game was a chance to prove his worth at Atari. "I buckled down," he remembers.

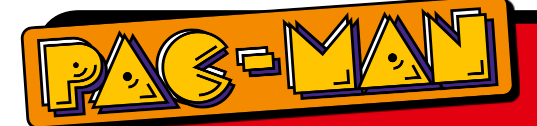
Translating the hit game to the 2600's primitive hardware was a serious challenge, and the programmers knew it. Colleague Bob Polaro passed on *Pac-Man* because he thought it impossible, selecting another arcade conversion instead – the popular *Defender*. Tod accepted the *Pac-Man* assignment, spending 80-hour weeks over the next six months trying to create a worthy version of the game on lesser hardware. "I was sufficiently unprofessional that I gave my very best," he says. The difficulty of the task sharpened his work habits and dedication.

The Atari 2600 was initially created to play *Pong* variations and *Tank* games, staples of the Seventies arcade era. The machine wasn't designed to play sophisticated arcade-style games that Atari was now trying to create. So, it was quite a technological achievement to tackle *Pac-Man*. "There's a lot of tradeoffs involved," Tod explains. "It's a very, very constrained system."

Hindsight makes the translation seem like straightforward, but that is surely revisionist history. The coin-op *Pac-Man* machine used a custom-made arcade system board with hardware running three times as fast as the 6502 microprocessor which powered Atari's 2600. The arcade game contained 16K of ROM, 2K of video RAM and 2K of general RAM, whereas the *Pac-Man* 2600 cartridge was limited to 4K of ROM in total – one quarter of the arcade machine. The 2600 also had less ability to display background graphics, which meant that any maze Tod created would have to be simpler and blockier, utilising chunky playfield graphics. In designing this version, he'd need to execute some clever programming tricks just to make it happen.

Faced with extensive (and necessary) compromises, Tod took a pragmatic view of translating *Pac-Man*. "I was thinking of it as an abridged adaptation," he said, "and the effort ▶





FIVE HOMEBREW VERSIONS

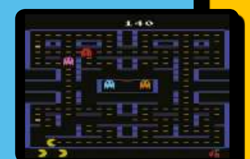
The best from the new wave of Pac-Man conversions

PAC-MAN 4K



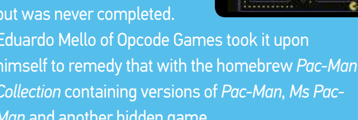
■ Programmer Dennis Debro sought to create a version of *Pac-Man* for the Atari 2600 that was more faithful to the arcade game while still remaining within the same 4K memory limit as Tod Frye's original game. The results are nothing short of impressive.

8K PAC-MAN



■ Daniel ______ (DINTAR816) took 2600 *Pac-Man* one step further and designed a *Pac-Man* game that utilises 8K of ROM and includes all the bells and whistles of the original arcade game, like animated cutscenes, improved sound and incredibly faithful ghost AI.

PAC-MAN COLLECTION FOR COLECOVISION



■ A version of *Pac-Man* was planned for the ColecoVision, but was never completed. Eduardo Mello of Opcode Games took it upon himself to remedy that with the homebrew *Pac-Man Collection* containing versions of *Pac-Man*, *Ms Pac-Man* and another hidden game.

JR PAC-MAN FOR ATARI 7800



■ The side-scrolling mazes of this overlooked *Pac-Man* sequel are challenging on any platform, and Bob DeCrescenzo brings a faithful rendition of the game to the Atari 7800 with a variety of player-friendly difficulty settings.

CRAZY OTTO FOR 7800 HOMEBREW PAC-MAN

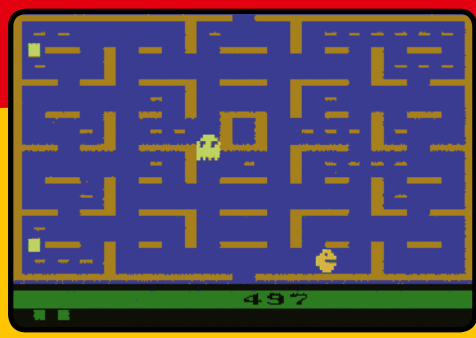


■ *Crazy Otto* was an unlicensed enhancement kit for *Pac-Man* arcade machines developed by General Computer Corporation. GCC worked with *Pac-Man* licensee Midway to turn the game into the beloved sequel, *Ms Pac-Man*. Programmer Bob DeCrescenzo hacked Atari's 7800 *Ms Pac-Man* game to better match GCC's original game.

was to catch the essential feeling, the ethos, the spirit – the soul of *Pac-Man*. *Pac-Man* was known to be a repeated pattern game. So, I worked out a very precise, repeatable logic for how the ghosts worked. It was not the one [arcade *Pac-Man* creator Toru] Iwatani used, but that wasn't computationally possible for me. What that actually means is, like coin-op *Pac-Man*, my *Pac-Man* produces completely reproducible patterns. If you do the same thing every game, it will do the same thing every game. And that's actually the level at which I understood the ethos or spirit of *Pac-Man*. It's a fundamental. I really honestly intended my *Pac-Man* to be as faithful a representation as I deemed possible and necessary."

The game arrived to much fanfare, and its initial performance did not disappoint. Sales were stratospheric, and *Pac-Man* would go on to be the bestselling Atari 2600 game of all time, moving a reported 7.7 million cartridges and earning nearly $200 million in gross profits for Atari. But a growing discontent began to fester beneath the glowing balance sheet. On 11 May 1982, *Electronic Games Magazine* published its first-ever bad review for an Atari videogame, saying, "Considering the anticipation and considerable time the Atari designers had to work on it, it's astonishing to see a home version of a classic arcade contest so devoid of what gave the original its charm." *Softline* computer magazine wrote that the 2600 version looked "less like Midway's original than any of the pack of imitators".

Tod's concessions to the 2600's hardware were obvious to devoted fans. The maze colours were different, the characters less detailed, and the game seemed to underscore the console's advanced age. For his part, Tod was unaware of the criticism, already working on his ambitious *Swordquest* series. "I didn't really know about all of the bad press for a long time," he says. "I was doing the next thing." The 2600 version of *Pac-Man* would



» [Atari 2600] Tod Frye used a pseudo-random number generator for the game logic, which made the ghosts act in consistent, repeatable ways.

eventually unfairly acquire the reputation as a half-hearted effort, a corporate cash-in. Early video game journalists certainly didn't rush to Tod's aid, either. Harsh reviews were just "part of the meat grinder *Pac-Man* went through", he later decided.

"You know what I say? Fuck the press," Tod retorts, now with 37 years of reflection. "*Pac-Man* was very, very credible. The things the press doesn't like were just the fact that it was the first. We would have fixed the obvious, easy-to-fix things that people harp on, if anyone anywhere in the human species had known at that point. No one knew. History was being made. We were just finding out what the rules were. That's what it is to be a pioneer."

Some within Atari felt the game wasn't ready for prime time. Atari's marketing manager of coin-ops, Frank Ballouz, said in a 1998 interview, "I took a look at this bullshit game and told Ray [Kassar, CEO of Atari] that no one's going to want to play it. But he didn't listen to me." But that seemed to be a minority opinion, as many Atari programmers were impressed with Tod's translation and what he was able to squeeze out of the aging 2600.

"The idea of what it meant to be a faithful representation of *Pac-Man* was not established," Tod says. "It did not exist at the time I wrote *Pac-Man*. No one else in that whole process really knew it. [Later], we, as a culture,



"FUCK THE PRESS. PAC-MAN WAS VERY, VERY CREDIBLE. THE THINGS THE PRESS DOESN'T LIKE WERE JUST THE FACT THAT IT WAS THE FIRST"

TOD FRYE

invented the idea of a meaning and created a definition of what an adaptation was. There is a direct connection between 2600 *Pac-Man* and arcade *Pac-Man*, and I was influenced by arcade *Pac-Man* when I made mine." Details like colour fidelity and maze design might seem like obvious decisions in retrospect, but Tod is adamant that those pioneering days left zero road maps for game development. "Not only did I get to be a case study," he says, "but I got to help make the rules, to help find out in that back and forth, which is only done through whole product development cycles."

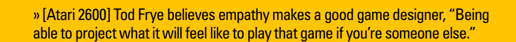
It's also probable that the marketing hype behind the game heightened anticipation to unreasonable levels – which led to a rubber band reception when the game didn't perfectly align with expectations.

During Tod's development of *Pac-Man*, Atari initiated a program of profit sharing ("incentive compensation bonus") to prevent senior game programmers from leaving and becoming competitors – as in the case of third-party developer Activision. This reward system wasn't instituted until after *Pac-Man* was completed, but it was life-changing for Tod. The agreement would award him $0.10 for every *Pac-Man* game sold. After its wild success, Tod was suddenly very rich, eventually earning more than $1.3 million in incentives.

The financial windfall was both liberating and overstimulating. "It was overwhelming. It's like winning the lottery," he said. "I was a little defiant, and I was a little out of touch. You don't deal with that as a 26-year-old. It was a lot of marijuana and cocaine. It completely changed my life." Tod struggled with this wealth. "In those three years I went from a salary of $19,000 a year to a $320,000



» [Atari 2600] Atari's 2600 version of *Ms Pac-Man* benefitted from critical hindsight and a larger 8K memory limit to faithfully adapt the arcade game.



» [Atari 2600] Tod Frye believes empathy makes a good game designer, "Being able to project what it will feel like to play that game if you're someone else."

royalty check. It did bend my brain, and it did honestly put my life in danger. But I survived. There are things I would do differently if I could have."

He taped a photocopy of his first royalty check – $320,000 – to a public bulletin board at Atari HQ. "I have no idea why I did that," he says. "I really don't. It was a long time ago. It sounds like something I shouldn't have done. Fuck if I know. I was only 26."

Tod bought 15 vintage guitars, new suits, two Alfa Romeos, a ranch in New Mexico and more. With the pressure release valve of such success, more of Tod's blunt intelligence came out, and to some colleagues, it seemed like arrogance. Did that resentment go both ways? "Some people viewed me as a genius and some saw me as a clown," Tod explained in a 1997 documentary. The license plate of his new Alfa Romeo Spider read 'PACMAN'.

By 1985, most of the money was gone. Bad advice and poor choices drained him financially. "I was on a downward spiral," he said. "It was too much money, too fast. It was more power than responsibility, and it broke me."

Some reviewers claim that 2600 *Pac-Man*'s critical failure started a landslide that began Atari's downfall. While *Pac-Man* might have forced game buyers to look more cautiously at new releases, its negative impact has been overblown. "They say, '*Pac-Man* and *E.T.* ruined a whole business!'" Todd laughs, "If I had that kind of power, I would productise it and retire! It's foolishness. A lot of times people want a story – not even a particularly believable story. But they want a story."

Yet he does realise that now, 37 years later, with an impressive software engineering career working on everything from videogames to solar power and AI – he'll always be known for *Pac-Man*.

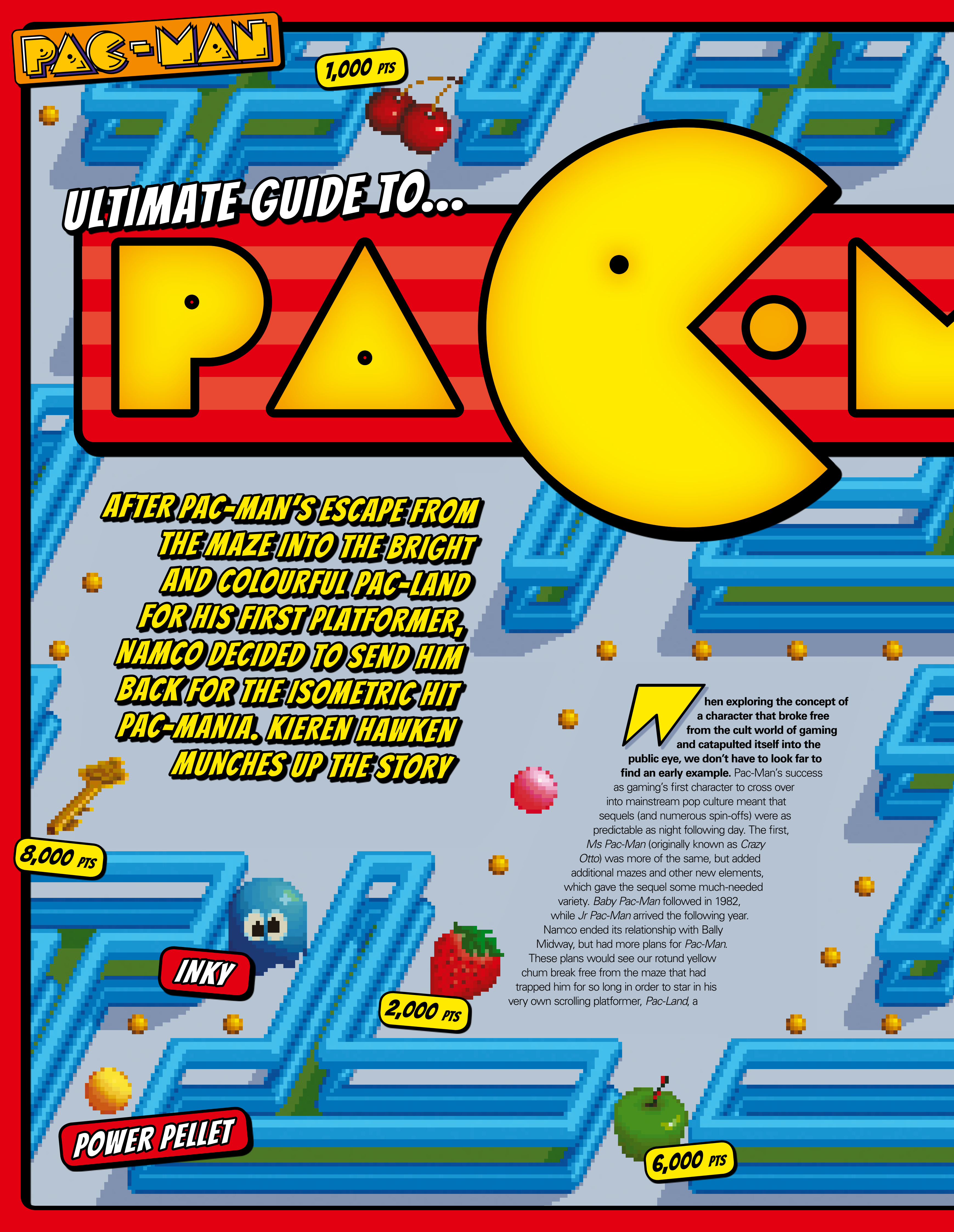


© Tim Lapetino

"*Pac-Man* was such a big part of my biography that I'm going to be living with it for the rest of my life," he says. "I feel different ways about that. The amount of critical scorn it's gotten and the swarms of tribal fanboys pissing all over it are not an ego booster. It actually is a self-esteem challenge. Some people want to say '*Pac-Man* sucked!' and I gave them that opportunity." After *Pac-Man* and the *Swordquest* series, Tod continued making games, both for the Atari 2600 and other later-generation consoles. But creating *Pac-Man* for the Atari 2600 is an experience that will never leave him. It was more than just another project. Its cultural significance, popularity and reception made a lasting mark. "In some way," he said, "who I am touched all those tens of millions of people."

In the final analysis, 2600 *Pac-Man* deserves a place in videogame history. Tod managed to capture the game's essence in hardware that was nearly 100 times lesser than its arcade predecessor. "I have regrets," he concludes. "But fundamentally, I'm proud. They tell me it's a waste of time to defend *Pac-Man*. I've got time to waste."





ULTIMATE GUIDE TO... PAC-MANIA

AFTER PAC-MAN'S ESCAPE FROM THE MAZE INTO THE BRIGHT AND COLOURFUL PAC-LAND FOR HIS FIRST PLATFORMER, NAMCO DECIDED TO SEND HIM BACK FOR THE ISOMETRIC HIT PAC-MANIA. KIEREN HAWKEN MUNCHES UP THE STORY

When exploring the concept of a character that broke free from the cult world of gaming and catapulted itself into the public eye, we don't have to look far to find an early example. Pac-Man's success as gaming's first character to cross over into mainstream pop culture meant that sequels (and numerous spin-offs) were as predictable as night following day. The first, *Ms Pac-Man* (originally known as *Crazy Otto*) was more of the same, but added additional mazes and other new elements, which gave the sequel some much-needed variety. *Baby Pac-Man* followed in 1982, while *Jr Pac-Man* arrived the following year. Namco ended its relationship with Bally Midway, but had more plans for *Pac-Man*. These plans would see our rotund yellow chum break free from the maze that had trapped him for so long in order to star in his very own scrolling platformer, *Pac-Land*, a



title that was based on the Saturday morning TV series. But Namco wasn't done with Pac-Man's adventures, and in 1987, some seven years after the original game, it sent him back to his roots for *Pac-Mania*.

By this point, Namco knew that yet another 2D maze game wouldn't cut it in the late Eighties, and so drew inspiration from other games. Namco had just taken a majority share in Atari Games, the American arcade company it had long been intertwined with. Atari Games had already tested a way of displaying pseudo-3D graphics with isometric projection, which was most notably used on games such as *Paperboy*, *Return Of The Jedi*, *Marble Madness* and *Crystal Castles*. It was perhaps the latter that provided the most inspiration of all, as Bentley Bear's vehicle already featured more than a passing nod to the *Pac-Man* games itself. This change of perspective would allow the Namco programmers to deliver advanced graphical detail, and also implement an array of features to separate it from Pac-Man and co's previous maze game offerings. The most prominent of these is the ability to jump – a press of the fire button sees Pac-Man launch into the air for just enough time to leap over an oncoming ghost. Timing is the key to mastering this particular tactic, however players shouldn't be fooled to think out hungry hero is alone in showing off this new airborne skill, as players will find out on later levels of the game.

To nobody's surprise, Pac-Man's old nemeses, the ghosts, reappear here. However the cast has also been upgraded somewhat. We see the return of mainstays Blinky, Pinky, Inky and Clyde from the original *Pac-Man*, but also Sue (from *Ms Pac-Man* and *Pac-Land*), who is now purple instead of orange. Unlike her original appearance in the earlier *Pac-Man*



PAC-MANIA'S PIXEL PUSHER

ARTIST JAY GUNN WORKED ON ALL THE HOME COMPUTER VERSIONS OF PAC-MANIA AT GRANDSLAM

First of all can you tell us how you got the job at Grandslam and how you were able to land the *Pac-Mania* job in particular?
I was working as a very young freelance games artist after leaving school. I applied for a job at Grandslam in Rotherham and one of the first jobs that I was given was converting the *Pac-Mania* arcade game to all home formats.

Were you already a fan of *Pac-Man* yourself and was it exciting to work with such an iconic character?
Like most Eighties kids I was a big fan of the *Pac-Man* arcade game. My bedroom was covered in *Pac-Man* stickers and I have fond memories of playing the game in the arcades. I spent a lot of my time drawing the graphics from those games in school notebooks.

Had you played *Pac-Mania* before you got the conversion gig and what did you make of it?
I was a big fan of *Pac-Mania* from playing it in the arcades and we got the actual arcade machine shipped into our office shortly after it was released. It had a very large display screen and it was quite unusual to see those types of isometric graphics in an arcade game.

Were you given any of the original source material to work with?
Not on *Pac-Mania*, I had to copy the sprites and graphics by hand. I had the arcade machine stood next to me so it came in very handy for referencing. Later we could rip the graphics from the arcade machines but the art assets always looked like neon pixelated vomit and needed a big amount of work to make them workable.

Which version was the most challenging to create and why?
The C64 version was very challenging because of that annoying elongated 2x1 pixel ratio and the fact that we had a very low screen resolution and very little useable RAM.

» [Arcade] Jay was well aware of *Pac-Mania* before converting it as he had often played it in his local arcade.

What version of *Pac-Mania* was your favourite one and why?
Without a doubt that would be the Amiga version because we could make it full screen and use the borders of the display area. It was quite unusual for games from that time period to be fullscreen and it was common place to have the game running in a window with a large border panel which would save on process power. We would usually place the onscreen elements such as score, lives and the title of the game in the border panel.

We've got to ask: are you afraid of ghosts?
I love ghosts! In fact, I'm working on a comic book *Coal Face* which is set in the Eighties game development scene and draws on my time making games when I was a kid. It features many ghosts of that era. You can read more about it on my twitter page at: @GunnComics.

sequels, where she served as nothing more than a replacement for the bumbling Clyde. In *Pac-Mania*, however, she chases our hero down like a Terminator. There are two new ghosts joining the cast, too, coloured green and grey and named Spunky and Funky. These are the spooks that you have to really keep an eye on, because like Pac-Man, they also posses the ability to jump, making avoiding them that little bit harder. As a way of ramping up the difficulty, *Pac-Mania* starts off with the original crew of ghosts and more are added as the levels progress.

Another feature introduced in *Pac-Mania* comes in the form of new power-ups that, in addition to Power Pills, give ol' Pac more ways to turn the table on his pursuers. These will appear in the same place as the regular bonus fruit, and the first of these is a speed pill that lets you



» [Arcade] Feeling blue? These ghosts certainly are and they will be even glummer when Pac-Man eats them!

shoot around the maze at a tremendous pace, giving your foes no chance to catch you. Another handy pick-up enhances your scoring abilities by doubling the point values of everything you munch. There are also several less notable tweaks to the game design too, but one that is definitely worth mentioning are the new side tunnels. Of course, anyone familiar with the original *Pac-Man* will know that these were a handy way to escape the ghosts. Now that the maze is much bigger, seen in a 3D perspective and scrolls, these tunnels have been changed a little but serve the same purpose. You still wrap around to the other side of the level however here they are much longer than before and also contain dots that need to be eaten up.

Moving away from the design changes and moving onto the most obvious upgrade, the graphics, there is more to talk about than just the new isometric perspective. One of the most attractive elements of *Pac-*

PLAYING TIPS

MASTER THE ISOMETRIC INSANITY

JUMP FOR JOY

■ The tactic that sets *Pac-Mania* apart from the original *Pac-Man* is the ability to jump. This becomes integral to avoiding those evil ghosts, but it's harder to perform successfully on later levels as your opponents get wise to your tricks.

TUNNEL RUNNER

■ As in the original game, the tunnels on each side of the maze provide *Pac-Man* with an ideal escape route when the going gets tough. Although the ghosts are also able to use these tunnels they are more reluctant than our protagonist.

PREY BECOMES PREDATOR

■ Okay, we all know there are four Power Pills in each corner of the maze, and in *Pac-Mania* ghosts like to follow you in chains, so the best thing to do is build up a following then lead them to their death!

RISKY BUSINESS

■ Grabbing the bonus items in any *Pac-Man* game is always a case of risk and reward. But this is even more prevalent in *Pac-Mania* where you now have power-ups as well as the bonus fruits. It's best to grab them as soon as you see them.

SPECIAL CIRCUMSTANCES

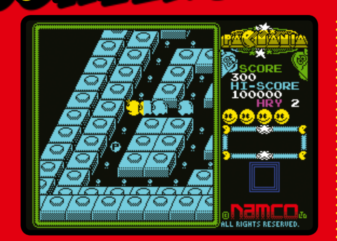
■ Watch the bottom-right corner of the screen for quick messages that pop up making you aware of special items that have appeared in the centre of the maze. You can plan your journey in order to grab them before they vanish.

MULTIPLIER MADNESS

■ Just like all the other *Pac-Man* games, your bonus multiplier increases with each ghost you eat. So try to get as many ghosts as possible in close proximity before you grab the coveted Power Pill so you get the maximum score possible.

CONVERSION CAPERS

WHICH PAC-MANIA PORT WINS OUT?



▼ AMSTRAD CPC

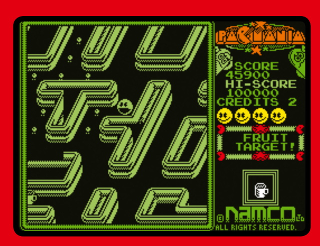
■ Amstrad fans were short-changed with little more than a port of the ZX Spectrum version, only much slower and with even less colour. Pac-Man has even lost his iconic yellow colour in this iteration. The scrolling is even worse, too, and the controls feel incredibly sluggish.

▼ MSX

■ Another Spectrum version port here, with some minor differences in the colour shades due to the hardware's palette, otherwise it's pretty much indistinguishable. This isn't such a bad thing, of course, especially when the decent soundtrack is ported over too.

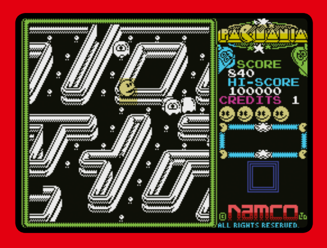
▲ ZX SPECTRUM

■ Despite the Speccy version lacking in colour – with only Pac-Man coloured differently – and using a windowed display, it's an accurate version of the original that is particularly notable for the fantastic AY music on 128k machines. The scrolling is jerky at times, though.



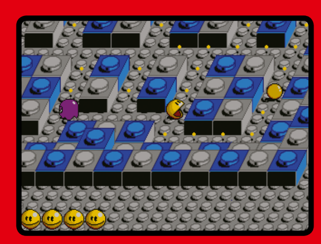
▲ COMMODORE 64

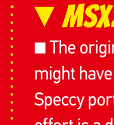
■ Despite there being some challenges with the C64 displaying the isometric visuals, Grandslam did a decent job. The status panel is nicely tucked into the bottom of the screen instead of the side. The SID music is nice but not as good as the Yamaha compositions.



▼ AMIGA

■ The Amiga version of *Pac-Mania* is one of the very best out there. It's fullscreen and almost identical to the original arcade game. Our only minor quibble comes with the slightly remixed renditions of the music that aren't a patch on the original soundtrack.





▼ MSX2

■ The original MSX version of *Pac-Mania* might have been nothing more than a Speccy port but Namco's own MSX2 effort is a different story. While the graphics are an improvement, the scrolling is distractingly jerky and the music is disapointing.

4,000 PTS

▲ ATARI ST

■ This Atari ST conversion only uses half the screen to display the actual game, but apart from that it's a good effort. The graphics here are vivid, with great colour choices, nice shading and slick animation. It also benefits from Ben Daglish's superb Yamaha music rendition, too.



▲ ACORN ARCHIMEDES

■ Krisalis' 32-bit Acorn iteration of *Pac-Mania* appears to be a port of the Amiga version. Like its fantastic Amiga predecessor, the Acorn Archimedes port of *Pac-Mania* is presented in fullscreen, is fast-moving and has an excellent rendition of the amazing soundtrack.





▼ NES

■ Perhaps the first thing you will notice about Tengen's NES port is that the perspective has been altered, appearing to be from a more overhead angle. This doesn't spoil the game too much though and in all other aspects the NES translation is more than competent.

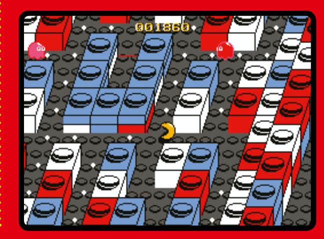


▼ GAME BOY ADVANCE

■ Appearing as part of Namco's own *Pac-Man Collection*, the GBA conversion is almost a perfect handheld iteration of *Pac-Mania*. We say 'almost' because our only bugbear is that the screen is zoomed in far more than it needs to be, meaning it's hard to avoid the ghosts.

▲ SHARP X68000

■ Those with some prior knowledge about this 16-bit Japanese powerhouse will probably be unsurprised to hear that this conversion is right up there among the very best *Pac-Mania* ports. It appears to be pretty much arcade perfect in every single way. A stellar effort.



▲ MASTER SYSTEM

■ This version smashes it's 8-bit rivals. Although the sprites are a little weedy and the music is a little lacking, the graphics are fullscreen and the control is spot-on. There is also the added bonus of a new secret level that doesn't appear in any other version.





◀ MEGA DRIVE

■ Given this version is playing on a 16-bit machine and was programmed by Tengen, which had full access to the original source code, you would expect Mega Drive *Pac-Mania* to be slick right? And you would be right; it's pretty hard to pick any holes in this conversion.



◀ PS3/XBOX 360/PC

■ This final conversion appears as part of Namco's own *Pac-Man Museum* compilation for the last-gen machines. All these versions use emulation to play the original in all its glory, meaning the only real change you'll notice is using a controller instead of the ball-topped joystick.





► *Mania* is the level designs themselves, with each stage taking on its own unique theme and challenges. Pac-Man travels from the opening, Block Town, with its near-copyright-infringing Lego bricks, to the Egyptian-themed pyramids of Sandbox Land and onto the final challenge at the Jungly Steps, which features a series of challenging steps or platforms seemingly suspended in midair. What made these creative designs even more special is the outstanding soundtrack that accompanies them. Each stage has its own unique tune, and we challenge you to not carry on humming them long after the game has finished. Namco had never been a company known for its music but *Pac-Mania* certainly changed that. Another more subtle graphical enhancement comes in the form of the enemy animations. With each ghost having their own distinct personality, their facial expressions will change depending on the situation, something that was no doubt carried over from the cartoon series.

After the huge success of *Pac-Mania* in the arcades for both Namco and Atari Games, which released the game in the west, the game was gobbled up pretty quickly for home computer conversions. These came from well-known Yorkshire-based software house Grandslam, which had previously published *Pac-Mania*'s predecessor *Pac-Land*. Console versions of the game were also released via a wide range of publishers including Atari Games' own label Tengen, TecMagik and Namco itself. Amazingly, it took Namco nearly ten years to release another game in the franchise after *Pac-Mania*, but from then they came thick and fast. More recently Pac-Man returned to the maze once more for the sublime *Pac-Man 256*, which also returned to the isometric perspective and even featured a *Pac-Mania* screen mode, meaning that this classic arcade game lives on to this very day. ★

» [Arcade] In Pac-Mania, Clyde and Blinky have swapped their colours, a possible throwback to the earlier Hanna-Barbera cartoon.

» Grandslam's advert for the home conversions was very similar to the original game's arcade flyer.



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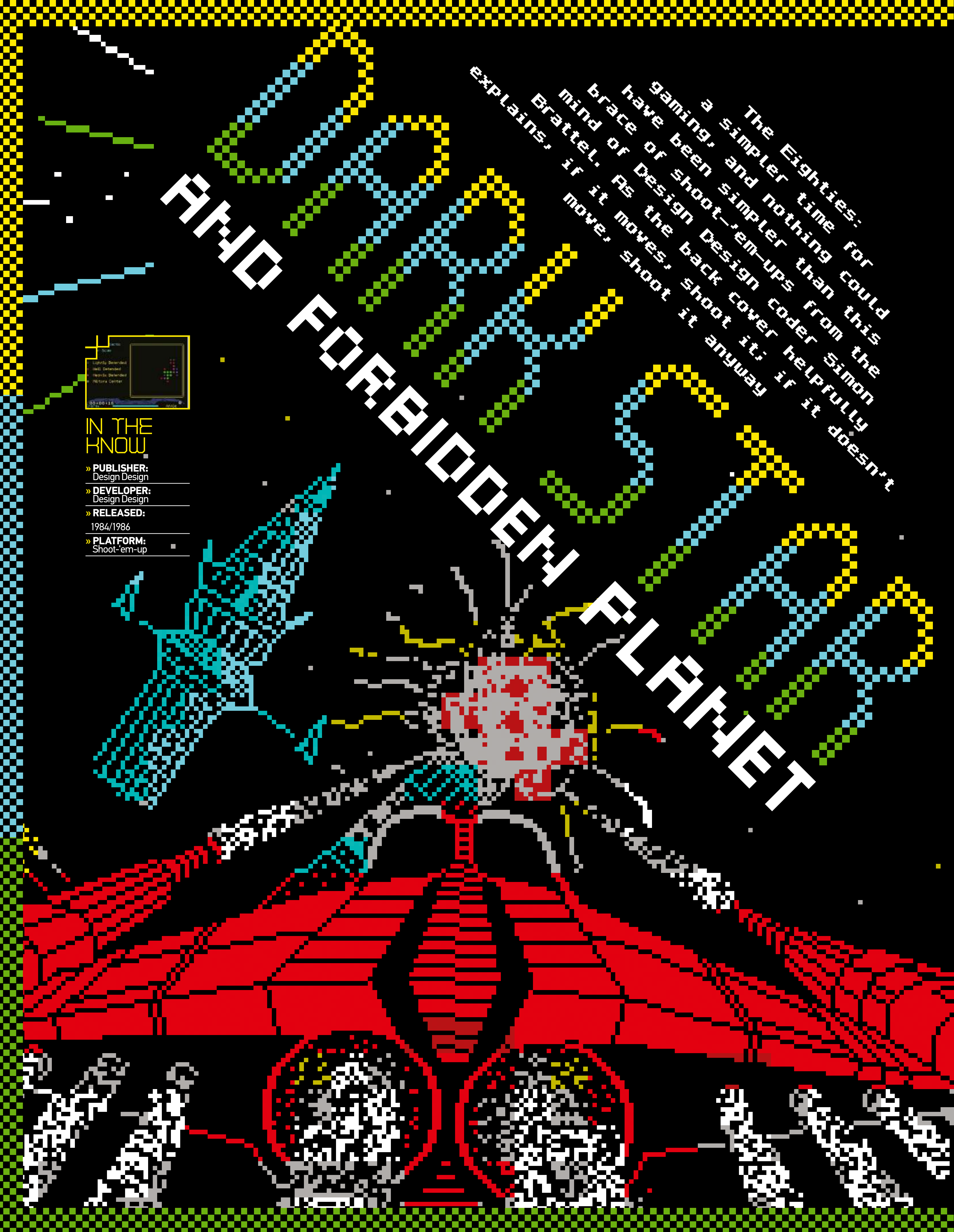
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Offer ends 30/04/2017.



Dark Star and Forbidden Planet

The Eighties: a simpler time for gaming, and nothing could have been simpler than this brace of shoot-'em-ups from the mind of Design Design coder Simon Brattel. As the back cover helpfully explains, if it moves, shoot it; if it doesn't move, shoot it anyway

IN THE KNOW

» **PUBLISHER:** Design Design
» **DEVELOPER:** Design Design
» **RELEASED:** 1984/1986
» **PLATFORM:** Shoot-'em-up

If you were a *Crash* magazine reader in the mid-Eighties, it was impossible not to know anything about the likes of Design Design and Simon Brattel. Often considered a darling of the industry, the studio formed from the ashes of Crystal Computing soon built up an impressive roster of games on the ZX Spectrum in particular. In an era where sole coders could produce a game, and be famous should it be popular enough, Simon Brattel himself was revered by *Crash* – ironic considering he didn't actually have much time for videogames, and often considered them mere programming exercises. "I like designing computers and writing very efficient software," he reveals. "So I got good at it with games and everything since. Perhaps I'd quite like to get back into it, write something on android and put that sense of humour back." But we digress; let's hop back to 1983 and the origins of *Dark Star*.

It won't surprise anyone who has played *Dark Star* to learn which arcade game had a modicum of influence in its design. "There was a stand-up *Star Wars* arcade machine at a motorway service station near our offices," recalls Simon. "Quite often we would all pile in and head over there in the middle of the night just to play the bloody thing." While not impressed by the game itself, Simon admired the technical aspect of *Star Wars*, most notably its starfields and lightning-fast gameplay. "And that inspired me to create a starfield demo for one of my own graphics cards." Preferring his role as a computer designer, rather than games designer, Simon had, since university, been creating his own machines, usually more powerful and adaptable than the commercial systems of the time. His latest machine was affectionately nicknamed 'Basil'. "I was getting much better graphics on them than your typical home computer, and I did this demo of a moving starfield to show off the fact it had really nice pixels. These were not tiny little pixels, they were great big blobs, although the joke is that, of course, today your average cell phone has 50 times the resolution."

While it may have just been a demonstration of what he could achieve, Simon and his colleagues were intrigued enough to wonder what could be done to make the scrolling starfield into a game, and it was plain the routine could easily form the basis of a space-based shoot-'em-up of some description. "I still remember seeing that starfield on Basil," recalls Graham Stafford, the de facto boss of Design Design. "Visual stuff like that was very common for us; Simon in particular was always playing around with various techniques." In a run-of-the-mill, defeat-the-empire scenario, the player pilots their spacefaring vehicle across the galaxy – which here is represented by a 16x16 grid of sectors containing several planets. Each planet is guarded by a network of towers and barriers; the former can be destroyed while the latter contain narrow tunnels that if safely negotiated, avoids any damage to the spacecraft. Destroy the enemy base on the planet and it's back into space to continue the fight.



» [ZX Spectrum] Once skimming across a planet, pressing the 1 key brings up this handy map.



» [ZX Spectrum] That's no moon! Well, actually, it is.



» [ZX Spectrum] *Dark Star*'s galaxy is a dangerous place.

> "Everything was difficult, we pushed the speed up, then added things and it drove the speed back down"
> **Simon Brattel**

"Everyone said it looked really good, but it was kind of left for a bit," says Simon. "Then one day I was tinkering around with it and reduced the Y axis to zero so that instead of having a big block of stars, you actually had a flat plane – the visual effect of slipping in and out of this looked really superb. At that point I thought, 'I'd actually like to do a game with this.'" However, a game programmed on Simon Brattel's homebrew computer was unlikely to sell many copies. Fortunately, despite its superior power, Basil was designed to develop Spectrum software. With a bespoke operating system and Design Design's own Zeus assembler installed, Simon felt proud and confident enough in his system to boast about its superiority over commercial development platforms in *Crash* Magazine. "The one thing about Sage," he said in issue 9 from October 1984, "is that for writing Z80 programs, Basil outperforms it by about five to one for speed – because that's what it's designed to do." But if the scrolling starfield was to become a commercial success it needed to move quickly, not just on Basil, but on the leading computer in the UK. "I'd discovered that if you want to do standard 3D movements, as you would do now, the maths is quite slow: you need to multiply by sines and cosines to do the rotates. This would have been far too computationally complicated for a Z80." Like many coders of the 8-bit era, Simon had to cleverly work around the limitations of the hardware in order to produce the desired result. He continues, "But if you took a block of stars and just slid the viewpoint around, it never changes the angle, but it moves ▶

MAKING A SPECTACLE

Simon Brattel on the story behind Dark Star's amusing B-side

***Dark Star* and *Forbidden Planet*'s flipsides both contain an irreverent program mocked up to look like the teletext pages of the time. Essentially a platform for Design Design to make fun of anybody it disliked, Simon explains how it happened. "The first adverts for the Spectrum made a fuss over the fact it was a colour computer, with colour graphics, and basically implying you could do teletext on it as a sales thing. Actually you couldn't, because teletext could do a higher resolution than on the Spectrum, so it sort of occurred to me that, as a pisstake, we could do something that looked like it. I was getting a bit bored coding *Dark Star*, so I knocked up this little editor and just started putting funny pages into it. But I didn't really have the time to do it properly, so Martin Horsley, bless him, liked the idea and wandered off one weekend. He wrote all the code and dumped it on my desk, which was bloody brilliant of him, before Simon Jackson and I wrote all the pages. We never resisted the opportunity to take the piss."**

P192 SPECTACLE P192 Thu 1 Apr 6:33/37
10:08 pm
"What are we going to put on this page?"
"I dunno"
"You'll have to think of something , they won't stand for another wasted page "
"I suppose we really ought to get on with the loader "
"Yeah , Dave will be furious !"
"Hey,aren't you supposed to be yellow ?"
"I think you've screwed the colours up "
"Shh no-one will notice"
"Quick - lets sneak off the bottom ...."



A FORCE ASIDE

More Spectrum Stars Wars – official and unofficial



3D STARSTRIKE

REALTIME GAMES, 1984

■ Coded by 3D wireframe expert Realtime Games, *3D Starstrike* is the ultimate homage to the 1983 *Star Wars* arcade game, replicating perfectly its exhilarating trench run and space battles. We told the story of this classic space shooter and its sequel back in issue 154.



DEATH STAR

RABBIT SOFTWARE, 1984

■ A simplistic shoot-'em-up, this game by Booty programmer John F Cain focuses on the trench run from the end of *Star Wars*. That's no X-wing though, that's… actually, what *is* the player controlling? Even in 1984, *Death Star* was not very impressive, despite its iconic inspiration.



STAR WARS: THE ADVENTURE

SP ENTERPRISES, 1984

■ Not commercially released, except perhaps by mail order, and created by Stephen Preston. It's a short game, and misses out the action-heavy climactic Death Star battle, but nevertheless is entertaining enough for fans of the genre.



DEATH STAR INTERCEPTOR

SYSTEM 3, 1985

■ Published by System 3, this is a port of the C64 original. While not a clone of the *Star Wars* arcade game from 1983, its origins are plain, and the famous John Williams score adds a sheen of respectability to what is a tough shooter.



DEVELOPER HIGHLIGHTS

HALLS OF THE THINGS
SYSTEM: ZX Spectrum, Amstrad CPC, Commodore 64
YEAR: 1984

2112 AD
SYSTEM: ZX Spectrum, Amstrad CPC
YEAR: 1985

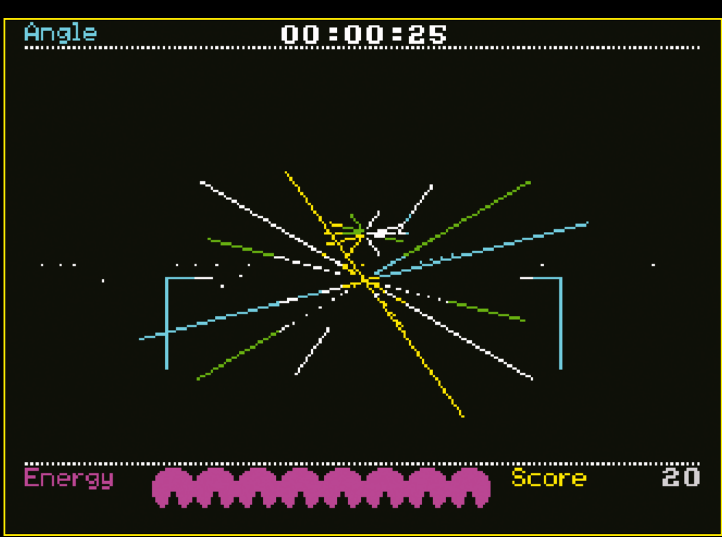
ON THE RUN (PICTURED)
SYSTEM: ZX Spectrum, Amstrad CPC
YEAR: 1985

Dark Star
Hall of Fame
1 "What are we putting in this one ?" 10
2 "It's the conversation" 10
3 "That's a silly idea" 10
4 "Well , you think of something" 10
5 "Hmmm , tricky …" 10
6 "Wait ! I've got it !" 10
7 "What ?" 10
8 "Sukhwinder Ryatt" 10
Press SPACE to play or ENTER for options

» [ZX Spectrum] As with most Design Design games, endless fun could be had with *Dark Star*'s high score table.

▶ around and you get much the same visual effect of flying through space, and the Z80 was reasonably fast at doing that." The template for the game was set; *Dark Star*, named after the John Carpenter movie that was popular with Design Design, would, by Spectrum standards, be a whirlwind shoot-'em-up, almost too fast for some reviewers. The name of the player's nimble ship, the Liar, came from Larry Niven's *Ringworld*, adapted from its original casual description of Lying Bastard, to a more parent-friendly name.

The name Liar, in addition to most of *Dark Star*'s 'plot' was devised in quick time after coding had eventually finished. "Doing standard 3D graphics that rotate, like other games I won't mention did, is trivial," Simon explains. "You could do that in a day, but the result is a terribly slow game, unplayably slow in my view. *Dark Star* took ages to develop because I started out with a slow bog-standard 3D environment and then played about with lots of ideas to speed it up." *Dark Star* became an exercise in optimisation – to the extreme. "Basically horizontal lines draw much faster than vertical ones, and vertical ones draw much faster than diagonal ones. And the lines you don't draw are even faster still." As a result, Simon drew as little as possible, starting with horizontal lines, followed by vertical, and only then using sloping lines as a last resort. As well as its slick gameplay, *Dark Star* had other strings to its bow. No other game had got even close to its framerate; other elements such as border graphics and the game's customisability set *Dark Star* well apart from the crowd. And what's this newfangled redefine keys option? "Ha," laughs Simon. "Those user-defined keys were in there to stop people moaning about our preferred zx/mn defaults. And as far as I know it was the first game to do proper redefinable keys, in that the player could assign as many keys as they liked to a function, or even one key to multiple functions." This freedom led to a odd method of controlling the game, he remembers. "I heard that one player set all the keys on the left hand side to brake, and all those on the right to accelerate, then put the Spectrum on the floor and used it like brake/accelerate pedals while steering with a joystick. I remember they said it kept their feet warm too!" But



» [ZX Spectrum] An enemy missile about to hit home in *Forbidden Planet*.

00:04:59
Energy





STAR WARS

DOMARK, 1987

■ Finally, ten years after the release of the film, and four years after the arcade game first saw action, Domark brought a conversion of *Star Wars* to the Spectrum. It's a decent conversion, unfortunately lacking sound, and to be frank, *3D Starstrike* had got there three years earlier.



» [ZX Spectrum] Those towers look familiar…

Simon admits the main reason for the relative wealth of options was to give gamers a choice in difficulty and how the game looked. "I didn't like having anything on-screen other than the outside view. But others liked to see cockpit graphics, scores and so on. So I gave people the choice."

As we reported in issue 127, Design Design was formed in 1983 after several of its members split from Crystal Computing. Having forged a good reputation thanks to games such as *Halls Of The Things*, Neil Mottershead, Graham Stafford and Simon were all well known the press and gamers alike, and anticipation for the first game under their new name was high. "As the first sheet appears, deep space, spinning plasma bolts, alien ships, an amazing starfield moving in perfect 3D, we gasp at the sheer speed of the graphics. No one has seen such fast or smooth animation," effused *Crash* in October 1984. Simon recalls the interview fondly. "Most of my code was designed around doing something impressive, and then looking to how I could attach a game to it." When released at Christmas 1984, *Dark Star* notched an impressive 89%, which comprised the perfect score for its sub-category use of computer, mainly on its creator's insistence that the game did utilise 100 per cent of the Spectrum's power.

Two years later, *Dark Star* received its inevitable sequel. "There wasn't anyone pressing Simon to do that as far as I recall," says Graham, "and it just sort of happened." Bored of programming, it was to be Simon Brattel's final ZX Spectrum game. "I'd had enough, it was another 3D game, and tedious as hell," he laments. "Everything was difficult, we pushed the speed up, then added things and it drove the speed back down." Taking its name from another famous sci-fi movie, *Forbidden Planet* involved a more complex map and, as the name suggests, avoided the outer space segments of the first game. "Technically it had a lot of bits that were very hard to do; like the force fields, which you had to go through when they opened, which was hard to do, but that didn't translate to looking very impressive. That was where it went wrong. A lot of work went into the mechanics and fundamentally it didn't pay off." The sequel was well-received, but Simon had had enough and left Design Design shortly after its release. "I said 30-year-olds don't write games, but how wrong was I?"

> "Visual stuff was very common for us; Simon in particular was always playing around with various techniques"
> **Graham Stafford**

Graham Stafford has somewhat fonder memories of *Dark Star* and its sequel. "*Dark Star* did well for us, and certainly managed to get our name on the map. In hindsight, maybe we could have made it far more successful with more marketing, more PR or more like the *Star Wars* game. By simply making *Dark Star* more commercial, it could have sold much more, but then it would have lost the purity for which it's rightly remembered." This purity – encapsulated in its pithy on-screen instructions – has ensured *Dark Star* and its sequel are still good for a blast, even 34 years later. ★

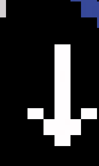


» [ZX Spectrum] An enemy missile about to strike home in *Forbidden Planet*.



» [ZX Spectrum] This busy tactical scan gives the player an idea of what they're heading toward in *Forbidden Planet*.







CLASSIC MOMENTS

Sabre Wulf

» **PLATFORM:** ZX SPECTRUM » **RELEASED:** 1984
» **DEVELOPER:** ULTIMATE PLAY THE GAME

You'd heard the rumours, of course, but you never really believed them. Yes, there was clearly a 'Wulf' in *Sabre Wulf*, but he surely wasn't going to be a match for your hero. Right?

Starting off deep in the jungle you soon start running rampant, hacking at bats, spiders, snakes and anything else that is foolish enough to stray into the path of your whirling blade. Entering a small clearing you face off against an array of critters, including two indestructible tribesmen, but the fight is worth it as you triumphantly nab the first piece of the legendary amulet you need. Your confidence soars as you break free from the shackles of the maze-like jungle and see looming mountains ahead of you. It's going pretty well.

Suddenly, and without warning, the dreaded Wulf appears and crouches in anticipation of an easy kill. Overly confident, you inch forward hoping to at least send him running away like those pesky hippos you faced earlier. The Wulf is immune to your blade, though and as you lose your last life you also learn fear. You won't be going near him again anytime soon… *

BIO

Cased in a lavish box and costing an eye-watering £9.99, Ultimate's game promised a lot. Fortunately, it more than delivered and turned out to be an exceptionally satisfying adventure game that saw you playing as Sabreman and battling your way through a monster-infested jungle in search of four pieces of a special amulet. Acclaimed at the time, *Sabre Wulf* has gone on to become one of Ultimate's most beloved games and even spawned several sequels, including the astonishing isometric adventure, *Knight Lore*.

MORE CLASSIC SABRE WULF MOMENTS

Flower Power



One of the things you quickly learn in *Sabre Wulf* is to look out for blooming orchids. These delicate flowers appear in certain locations throughout the jungle and randomly bloom into different types of flora. While you'll want to avoid the pink and yellow variants, the red and blue ones should be collected at all costs. The blue orchid is particularly cool as it gives you invulnerability and a handy speed boost.

Flame On



Sabre Wulf is a game that encourages movement. We know this because enemies continually spawn in all sorts of random places to ensure that Sabreman is always kept on his toes. Sometimes, though, it's fun to stay in one location, killing those enemies and racking up lots of points in the process. Ultimate doesn't want you to tarry, though and after a short while an indestructible flame will begin to home in on you, forcing you to continue.

Amulet Get!



Sabre Wulf's map may not be gigantic by modern standards but there's still a lot of ground to cover, particularly as some of the screens have multiple paths, meaning you'll constantly revisit them. It's therefore incredibly satisfying when you finally track down one of the four missing pieces of your coveted amulet. The Stamper brothers were clever enough to hide them in random places, too, meaning no two quests are ever the same.

Rhino Whisperer



Sabreman might be a courageous adventurer but not every animal falls to his fancy sabre slashing. Rhinos and warthogs are two jungle denizens that can't be killed by the intrepid explorer and they often appear in the most annoying locations. Fortunately, they can be shifted with a quick whack on the buttocks with Sabreman's sabre. Just be sure to keep a safe distance while you're doing it and enjoy the resulting colour clash.


BBC MICRO
KING
OF THE
ARCADE
CLONE

The BBC Micro was home to dozens of fantastic coin-op conversions that belied its scholarly background. Martyn Carroll speaks to a number of well-known coders to find out why the Beeb was a good fit for faithful arcade clones



» Jonathan Griffiths, developer of *Snapper* and *Rocket Raid*.



» The prolific Peter Johnson wrote more than a dozen coin-op conversions for the Beeb.

The BBC Micro was always a studious machine. It was expensive: the preferred Model B cost as much as £399 in 1982, which was around three times more than competing micros, like the Commodore VIC-20 and Sinclair Spectrum. It was educational: Acorn designed the machine for the BBC's Computer Literacy Project and off the back of that BBC Micros infiltrated classrooms up and down schools of the UK. As such, a huge amount of education software was developed for the machine.

The BBC Micro might have been expensive and educational, but it certainly wasn't elitist. Many games were available too, of course, and a number of influential masterworks like *Elite*, *Exile* and *The Sentinel* began life on the system. Furthermore, the Beeb wasn't just about weighty titles that created whole worlds inside 32K of memory – it was also adept at running pure arcade games based on the hit coin-ops of the day. If you wanted to play an authentic game of *Space Invaders*, *Pac-Man*, *Donkey Kong* or *Frogger* at home then you were in luck. In fact, you could argue that no other computer could replicate the golden age of arcades with quite the same verve, assurance brilliance as the Beeb.

Despite its academic leanings, the BBC Micro was a good platform for arcade-style games. Programmer Kevin Edwards coded the *Galaxian*/*Galaga* clone *Galaforce* for Superior Software and he appreciated the performance and flexibility that the hardware offered. "It was equipped with a fast, 2MHz 6502 CPU which gave the machine a lot of horsepower," he says. "This was important as it didn't have any hardware sprites. In addition to this, it had a custom video ULA and 6845 display controller that gave the user lots of different

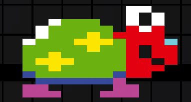
> **"It was equipped with a fast, 2MHz 6502 CPU which gave the machine a lot of horsepower"**
> Kevin Edwards



graphics modes to choose from. Some were low resolution, with four or 16 colours, and others were higher resolution, but only supported two colours. All of these modes were bitmapped, rather than character-based, which allowed every screen pixel to be changed independently without limitation – perfect for writing 3D wireframe or shaded games. The 6845 also allowed you to do horizontal hardware scrolling that was perfect for porting games such as *Defender* and *Scramble*."

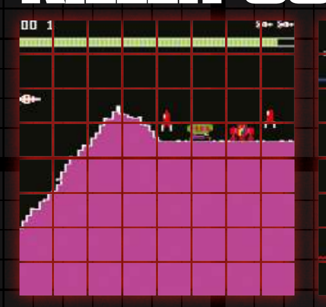
Jonathan Griffiths concurs, having developed the faithful *Scramble* clone *Rocket Raid* for Acorn's software division, Acornsoft. For him the ability to produce pixel-perfect animation and smooth scrolling was key. "The double-buffered RAM meant that the screen access was interleaved with the processor access," he says, "so the software could read and write to the screen memory whenever it wanted without having to worry about screen glitches. And then the 2MHz 6502 was fast enough to keep up with the screen refresh, as long as the software was written efficiently. One of the things I did in *Rocket Raid* was set up a timer in the 6522 support chip to tell me the vertical position of the electron beam used in the TVs and monitors, so I could ensure I only redrew the graphics that weren't too close to the beam and avoided the occasional 'tearing' of sprites. Also, the ULA for colour handling and the 6845 for screen resolution and position meant that the colours of the arcades could be replicated, which made things easy."

Praise for the BBC's colour palette is something that Matthew Atkinson echoes. Matthew, who would go on to develop the all-time Beeb



KILLER CONVERSIONS

Ten titles that showcased the BBC Micro's arcade credentials







ROCKET RAID 1982

■ This Scramble clone from Jonathan Griffiths is a masterclass in how to bring classic coin-ops to life on the Beeb. It perhaps scrolls a little fast, resulting in a difficult challenge, but overall this is a hugely satisfying blaster that set the standard which others had to follow.

PLANETOID 1982

■ Originally released as *Defender*, before being hastily retitled to avoid the wrath of Williams, this version of the Eugene Jarvis classic is faultless. It looks and plays just like the original, and providing you can grasp the controls (there are a lot of keys), you'll be well rewarded.

KILLER GORILLA 1983

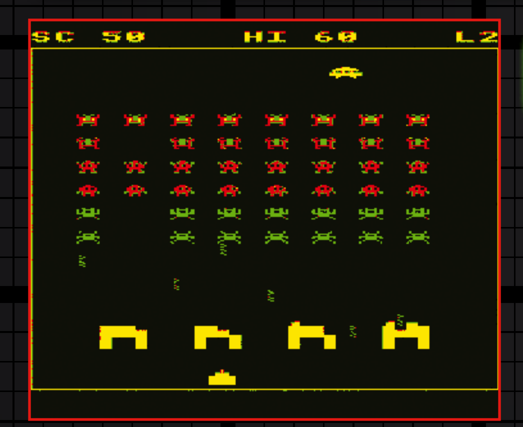
■ Not just the best name for a Beeb clone, but also a strong contender for the best clone available on the machine. It basically is *Donkey Kong*, despite coder Adrian Stevens basing it purely on screenshots he'd seen of the original in a magazine. A sterling piece of work.

ZALAGA 1983

■ Forget *Frak!* Nick 'Orlando' Pelling was the king of BBC Micro shoot-'em-ups. Having previously plundered *Galaxian* for his clone *Arcadians*, he turned to the arcade sequel *Galaga* and the result was even more impressive, being both super-fast and supremely fun to play through.

FORTRESS 1983

■ Some doubted whether Sega's *Zaxxon*, with its scrolling isometric graphics, could be recreated on the Beeb, but coder Mat Newman managed to make it work (despite the odd flickering sprite). It's tough for sure, but as a technical showcase it's very impressive.



» [BBC Micro] Simple *Space Invaders* clones were ten-a-penny on the Beeb. This is Invaders from IJK software.

> "The BBC Micro eclipsed the Spectrum in terms of technical capabilities" Peter Johnson

▶ classic *Repton 3*, wrote the official conversion of *Tempest* for Atarisoft (although it was ultimately published by Superior Software after Atarisoft abruptly quit the Acorn scene). He says, "*Tempest* is a colourful game that looks best with a full eight-colour display, something the BBC was good at. Other computers used colour screen attributes which didn't work as well. If you look at other 8-bit conversions – including my own one for the Acorn Electron – they look a bit drab in comparison. A phrase I came across recently is 'always choose colour over resolution'. Most of the early Atari arcade games used a 1MHz 6502 with various hardware enhancements to assist the display. The BBC had a 2MHz 6502 which gave you some extra power to try and emulate the arcade hardware."

Matthew also praises the machine's sound chip which was capable of emulating the zaps, pings and crashes that accompanied your typical arcade game. "The sound on the BBC was comparable to other 8-bit computers that used more advanced sound chips. The downside was the amount of processing power used to service the sound generation, something that was done more in hardware on other machines."

Another Beeb aficionado is programmer Peter Johnson. He began his career writing arcade clones for the machine, including *Q*bert* and *Deathstar* (a version of *Sinistar*) for Superior Software, before moving over to other systems. He's well placed to discuss the BBC Micro hardware compared to its contemporaries. "The BBC Micro eclipsed the Spectrum in terms of technical capabilities," he states. "The C64 had other advantages that the Beeb couldn't match, such as hardware sprites and scrolling, although the Beeb's processor was twice as fast to compensate. Another difference was a brighter colour palette. To me, many C64 games appeared a bit washed out – although I would have loved to have had a few more shades to pick from than the eight true colours the Beeb was limited to. Skin tone choices were limited to yellow, magenta, pure black or pure white, for instance, so realism was out of the window. This probably influenced the style of games we saw on that platform, as it favoured the abstract style."

Peter also recalls the novelty of making the Beeb 'speak'. "Add-ons like the speech system were fun. Voiced by newsreader Kenneth Kendall, it could



» [BBC Micro] Dunjunz was Bug-Byte's Gauntlet clone, although it did split the action across four screens.



» [BBC Micro] Peter Johnson worked on a number of official conversions for Ocean, including *Mikie*.



» [BBC Micro] Attack On *Alpha Centauri* was a great looking but by-the-numbers shooter.



MR EE! 1984

■ Adrian Stephens followed up his excellent *Killer Gorilla* with this brilliantly colourful clone of *Mr Do!* that was published by Micro Power. In the same year Superior released a rival version titled *Mr Wiz!*, but Adrian's version comes out on as the most faithful and playable.

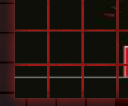
DEATHSTAR 1985

■ This shooter from Peter Johnson actually started out as an official conversion of Williams' *Sinistar*, but when the deal collapsed it was picked up by Superior and retitled *Deathstar*. Unsurprisingly it's extremely faithful to the original, and even supports the speech module.



CRYSTAL CASTLES 1986

■ Another Peter Johnson title that was due to be published by Atarisoft, before it was later snapped up by US Gold and put out as the official Beeb version. The isometric graphics look great and Bentley zips around really quickly – although he looks bugger all like a bear.



KIX 1986

■ Taito's *Qix* was a simple concept that could be replicated on most home computers, so it's hardly surprising that the Beeb was home to a quality clone. In fact there were several, including Micro Power's popular *Frenzy*, but for us Superior's *Kix* is the best of the bunch.

THRUST 1986

■ This is a slight stretch as most wouldn't class *Thrust* as a true conversion, but it is clearly influenced by classic coin-ops, specifically Atari's *Lunar Lander* and *Gravitar*. It also gives us an decent excuse to feature one of the most perfect games to ever grace the BBC Micro.

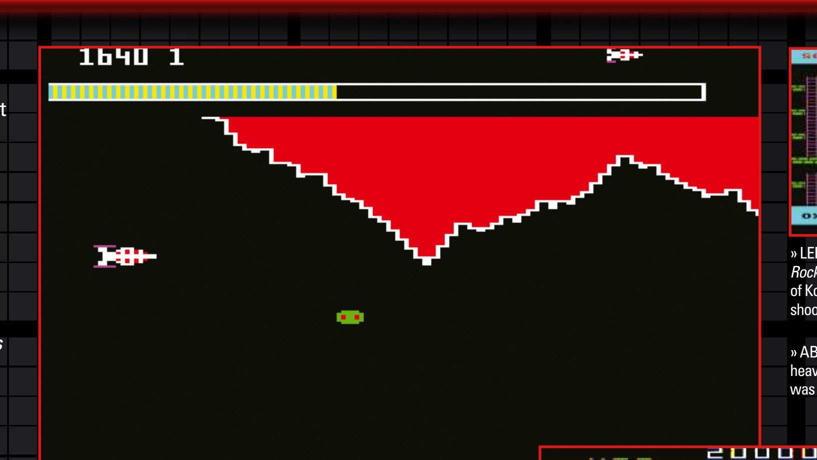
only speak from a limited vocabulary. When the boss in *Sinistar* had finished building, it would laugh and say 'I am complete!', so when I cloned it in *Deathstar* I used the chip to make it say, 'R R R, I an complete!', which was the closest I could get. I bet it scared the life out of someone when they heard it do that for the first time."

If anyone has any doubts as to how capable the Beeb was at recreating coin-ops, they only have to look at the early output from Acornsoft. They might have been unofficial, but titles like *Planetoid* (*Defender*), *Snapper* (*Pac-Man*), *Meteors* (*Asteroids*) and *Hopper* (*Frogger*) provided Beeb owners with an authentic arcade-at-home experience. Quality clones also came from Program Power (later Micro Power) who scored hits with *Killer Gorilla* (*Donkey Kong*), *Mr Ee!* (*Mr Do!*), *Frenzy* (*Qix*) and *Bumble Bee* (*Lady Bug*). And, of course, there was Superior Software which published a monsoon of coin-ops clones.

Having authored several games for Superior, Peter handled the official Beeb conversions of *Yie-Ar Kung Fu*, *Mikie* and *Arkanoid* for Ocean's Imagine label. "The BBC got such a reputation due to the amazing early work that Acornsoft did in replicating arcade classics of the time, setting an example for us all to follow," he continues. "I always felt I should be aspiring to match the quality of its early titles with all my conversions."

However, not everyone we spoke to felt that the Beeb was ideally suited for coin-op conversions. "It was only ever a middling fit for arcade clones," says Nick Pelling, the celebrated author of *Arcadians* (*Galaxian*) and *Zalaga* (go on, guess). "Even though the graphics memory was nicely laid out, the amount of memory left over for squeezing code into was never really enough."

Ah, memory. On 8-bit computers there was never enough RAM, and the Beeb suffered more than most. The Model A had just 16K so it was largely overlooked as a gaming platform. The Model B had 32K, which was preferable but still limited. "Memory was an issue, certainly," admits Jonathan Griffiths. "We typically wanted a colourful screen, so that meant Mode 2, which was 20K of our 32K RAM gone immediately. And then the 6502 zero-page and stack was another 512 bytes. Finally, the BBC OS claimed a further 3K, so we were left with only 9.5K to craft our masterpieces. We had to use various tricks to claw back as much as we could. One example was in Geoff Crammond's racing game *Revs* where he cunningly put bits ▶



» LEFT [BBC Micro] Acornsoft's *Rocket Raid* was a very fine version of Konami's landmark scrolling shooter *Scramble*.

» ABOVE [BBC Micro] *Monsters*, heavily inspired by *Space Panic*, was an early hit for Acornsoft.

» [BBC Micro] Matthew Atkinson's official version of *Tempest* was published by Superior Software.

> "We were left with only 9.5K to craft our masterpieces, and that tiny budget included all our graphics"
> Jonathan Griffiths

KEVIN EDWARDS Q&A

The Galaforce creator reveals the story behind his hit space shooter



Can you briefly describe your path into games programming?
It started at school in 1979 where I had access to a Commodore PET computer then moved to a Nascom 2 kit computer, and finally to the BBC Micro. A group of like-minded friends wanted to write their own games and I guess there was a bit of healthy competition between us as to who could get their games in the shops and make a bit of money.

Were you a big fan of the classic arcade games of the era?
Absolutely. The early arcade games were just amazing and consumed a lot of my spare time and money. I used to travel around Manchester to play them, in takeaways, city centre arcades and even record shops. It was always great when you discovered a new game.

How did *Galaforce* come about? Did you create the game first and then take it to publishers?
Galaforce was a project I was developing in my spare time, with a shoot-'em-up game as a goal. From a coding point of view, it started with a set of software sprite routines. I tweaked and reworked them so that they were as fast as possible, reducing the CPU clock cycles they consumed. After this I began building the rest of the game framework – alien pattern movement, missiles, starfield, scoring system, player control etc. *Galaforce* took elements from several arcade games including *Galaga*, *Star Force* and *Galaxians*. I then added my own elements to improve the gameplay. When the game was almost complete I approached Superior Software to see if it was something that it would consider publishing. I got a quick, positive response from Richard Hanson and we began tweaking and polishing it ready for publishing. I also persuaded a school friend of mine, Martin Galway, to create the music and sound effects for the game.



Can you recall any particular technical challenges you faced during the development?
It would have to be memory – or lack of it. I battled with the game's memory footprint and had to optimise the code and data size constantly. *Galaforce* ran in screen Mode 2 which takes 20K of memory out of the available 32K.

How difficult was it porting the game to the Acorn Electron?
Galaforce was ported to the Electron in about a week. Most of the development could be done on the Beeb and then tested on Electron hardware when required. The biggest chunk of work was changing the sprites, and other artwork, to use four colours instead of eight. The game was switched to screen Mode 5 and the music was simplified to a single melody track. Both versions were very well received and sold well thanks to Richard and his team at Superior.



What prompted you to return with *Galaforce 2*?
I wanted to add some important elements that I didn't have the time or memory to do in *Galaforce* and to bring it up-to-date. This included improving performance, increasing the number of active sprites, adding minibosses and special pick-ups, introducing more complex attack patterns, more missiles and so on. However, it was 1987 when *Galaforce 2* was started and sales of 8-bit computer games were dropping off quite substantially. This didn't put me off and I decided to push ahead with the game. It wasn't released as a solo title and was instead put on a compilation with three other titles. Sales were okay, but times were hard for Beeb software and *Galaforce 2* was my last Beeb game.



of the software in the screen display, in the sky area, by setting the palette entries for every pixel to be blue. That definitely shows that we had an issue with memory."

Matthew Atkinson also struggled with the lack of RAM. "The standard machine was lacking in memory compared to some other computers," he says, "but it could be circumnavigated to some extent by reprogramming the 6845 video chip to reclaim more memory in high-resolution colour modes. The BBC could have used an extra 16K in the 'sideways' RAM slot as standard. That would have been so liberating for programmers and led to better games." The BBC B+ and Master series models did come with extra RAM, and a number of games would automatically detect it and deliver enhancements if present. However, the Model B remained the core machine and publishers understandably targeted that first and foremost.

While the memory was a hurdle to overcome, the consensus from the programmers was that the Beeb was a great machine to develop games for. Kevin Edwards says, "BBC BASIC had a built-in assembler that made it very easy to assemble and test your own 6502 code. All the top games were written in machine code and this was so easy to do with a standard Beeb – ideally with a floppy drive. The code assembled fast and could be tested within seconds. There was no need for external development machines or extra hardware. It also had a great keyboard which was important when you spent all day, coding."

Jonathan Griffiths was also thankful for the assembler that was included within the machine's BASIC interpreter. "It was a huge benefit. I taught myself 6502 assembler on the BBC's predecessor, the Acorn Atom. That had the same combined BASIC and assembler, but crammed into just 8K rather than the 16K that the BBC had. Thanks to the extra space there was now floating-point arithmetic, nicer BASIC and an even better assembler. Because it was so easy to swap from BASIC to assembler and back, that made writing test fragments much easier."

Matthew Atkinson is in agreement about the assembler. "It was fabulous for games development, providing the ability to mix assembler and BASIC, create macros and so on. I later did some development work on the Amstrad CPC, which was very similar in technical capabilities to the BBC, but much more difficult to use in this respect."







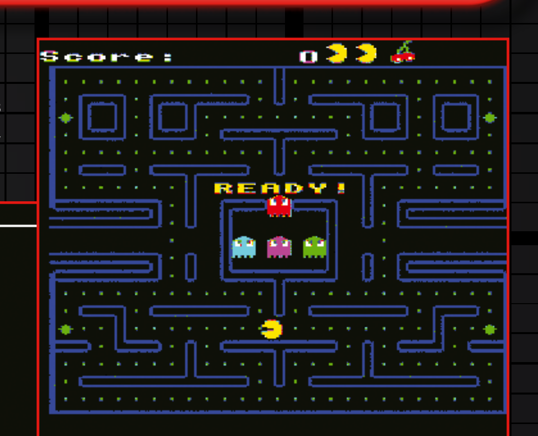
One of the thornier aspects of the era was the sheer number of unlicensed arcade clones. These could be found on most home computers, but the Beeb in particular was a hotbed of brazen clones. Jonathan Griffiths reveals that he and his coding colleagues, Neil Raine and Tim Dobson, were given free rein by Acornsoft, so they'd go out and play the latest coin-ops and then divvy up between them which ones they'd convert. And Jonathan can't remember any significant problems arising. "There were copyright issues with *Snapper*," he says. "I changed the sprites and that fixed that problem. We got away with *Rocket Raid*, even though it was even more of a copy of *Scramble* than *Snapper* was of *Pac-Man*."

One theory as to why so many clones went unnoticed on the machine involves the BBC connection. Did copyright holders believe that the broadcaster was involved and thought twice about sending in the lawyers? Peter Johnson doesn't think so. "This was common across all home computers, so I don't think it was the BBC name that put them off. I was more likely that the US-based companies didn't notice at first as the BBC Micro wasn't big in the States. The home computer market started out small, and it was a more naive time generally, with the finer points of what was covered by copyright or trademark laws still to be tested in court. My first game *Q*bert* received a cease and desist letter from Gottlieb after only a week or two on-sale, but that was because we were using the actual name. Several years of cloned games under different names followed – although how we never attracted a writ for using the word '*Deathstar*' I'll never know."

Licencing issues aside, the fact remains that the BBC Micro was a fantastic platform for games. An interesting facet of this is that many gamers will have enjoyed these titles despite never actually owning an Acorn. You see, with BBC Micros present in so many classrooms, there would almost certainly be clandestine disks full of arcade games floating around, for those after-school computer clubs where members wanted to play *Killer Gorilla* rather than *Granny's Garden*. In this respect the not-so-studious BBC Micro served an edifying purpose, ensuring that our kids were well versed in dot munching, barrel jumping, alien destructing and other essential life skills. *

> **"It was fabulous for games development, providing the ability to mix assembler and BASIC"**
> Matthew Atkinson

» [BBC Micro] Before creating *Repton*, Tim Tyler wrote a version of *Moon Patrol* that was published by Superior as *BMX On The Moon*!



» ABOVE [BBC Micro] Following a complaint, Jonathan Griffiths was forced to change the sprites in *Snapper*, his *Pac-Man* clone.

» BELOW [BBC Micro] We're not sure if this is a screen of Superior's *Frogger* or a Hawaiian shirt.



OFFICIALLY POOR

A round-up of licensed games that were cloned and dethroned



POLE POSITION 1984

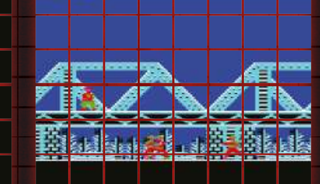
■ Namco's F1 game ended up on most home systems, including the Beeb courtesy of Atarisoft. Sadly it was spoilt by awfully sluggish controls. Much better was Kevin Edwards' *Crazee Rider* (1987), which swapped cars for bikes and was the better racing game all round.

ASTEROIDS DELUXE 1984

■ This official conversion of the *Asteroids* update was canned by Atarisoft (although it has since surfaced). Although a decent enough game, its existence was largely pointless anyway as Acornsoft had already published Meteors, Neil Raine's beautifully-faithful clone.

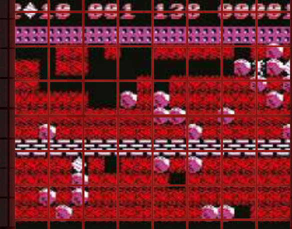
MOON CRESTA 1986

■ Incentive's official conversion of the Nichibutsu coin-op arrived two years after Superior's unofficial clone *Star Striker* debuted on the Beeb. Was it worth the wait? Not really, as *Star Striker* was more than a match for the official version, and could be picked up by gamers for much cheaper.



GREEN BERET 1987

■ Like most home versions, *Green Beret* on the Beeb was a bloody difficult game to finish. It was also fairly ugly to look at. If you wanted a decent run-and-gun game then you'd be far better seeking out the excellent *Stryker's Run*, which looked better, sounded better, and played better.



BOULDER DASH 1988

■ A controversial choice no doubt, particularly as Tynesoft put together a decent version of Rockford's debut outing. But seriously, how many BBC Micro owners didn't already own *Repton* or one of its many sequels by the time this official version arrived? Zero, that's how many.





Fray CD: Xak Gaiden

ACTUALLY, IT HOLDS TOGETHER WELL



» PC ENGINE » 1994 » MICRO CABIN

When I'm shopping for import games, if I see a screenshot that looks like *Fray CD* here, I usually skip right on by. While I know enough Japanese to navigate menus here and there, I certainly don't have the language skills needed for an RPG. But here's a case where I was mistaken – despite the presence of gold, a HP reading, treasure chests and a permanently visible inventory, this is no RPG. *Fray CD* is actually an action spin-off of the *Xak* series of RPGs.

The titular character *Fray* is an aspiring sorceress, who wants to develop her powers to become useful to Latok, who rescued her in the original game. To the player, this translates as a top-down run-and-gun – the bulk of the game is spent engaging in shooting and some light platforming, with occasional simple RPG-style interludes featuring shops and simple puzzles. It's never quite as intense as the likes of *Mercs*, but there's a decent enough challenge there, and lots of upgrade options like elemental rods that allow you to shoot fire and lightning, too.

Fray CD is an attractive game with colourful visuals and plenty of voice acting, which clearly opts for a humorous tone – even I could tell that the second boss was really hacked off when Fray called her "obaasan" (that'd be 'granny' over here). I'm sure it's hilarious if you understand the language, but even to a monolingual blockhead like me there's enough fun on offer that I'm glad I didn't trust my first impressions. *



GOLD
804



THE HISTORY OF SONIC ON THE MASTER SYSTEM

While Sega's speedy hedgehog is generally remembered as a 16-bit superstar, his appearances on Sega's 8-bit platform were just as memorable. Nick Thorpe takes a look at the unique Sonic offerings available to Master System owners…

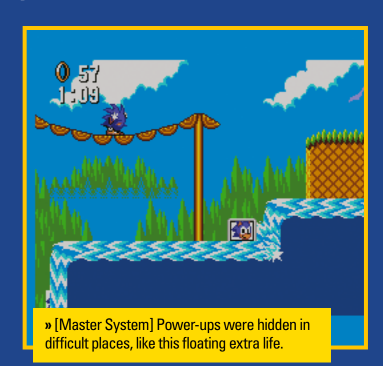


SONIC THE HEDGEHOG 101

■ *Sonic*'s core offering is platform games, in which the goal is to clear stages en route to a showdown with the nefarious scientist Dr Robotnik, who enslaves animals in robotic shells. Collecting gold rings protects him from death, while grabbing Chaos Emeralds is required to see each game's best ending.

If there was one thing that Sega craved at the beginning of the Nineties, it was star power. Despite boasting good conversions of some extremely popular arcade games, its Master System had struggled on the world stage for a variety of reasons, one of which was that it lacked a true competitor to Nintendo's marketing juggernaut Mario. The plumber's family-friendly appeal was backed with some classic videogames, whereas Sega's mascot Alex Kidd had suffered from uneven game quality and some truly horrendous artwork. While the recently-introduced Mega Drive was doing better than the Master System had, it was still finding its identity. Worryingly for Sega, even in places where the Master System had done well, it was clear that the brand was far from invincible. The UK distributor of the NES had struck a deal to bundle *Teenage Mutant Hero Turtles* with NES consoles in 1990, and over Christmas that star power allowed the Nintendo console to outsell the Master System for the first time. Other strong Sega territories were in much the same position, with an Australian Nintendo advertising campaign pointing out that the only way you might see turtles on a Master System would be if live ones started crawling on it.

By this time, Sega had recognised its deficit in the superstar department and was actively working to address it. A company-wide character design contest had been put into place, with the winner being a small hedgehog by Naoto Ohshima, who was best recognised beforehand for his work on Master System games such as *Phantasy Star* and *SpellCaster*. Sonic was to be a speedy critter, an attribute designed not only to position him as an alternative to Mario, but to emphasise the raw processing power of the Mega Drive. But even as Sonic Team got to work on making the game that would sell the Mega Drive, Sega recognised ▶



» [Master System] Power-ups were hidden in difficult places, like this floating extra life.



» [Master System] Later scenes got trickier, with tough hazards to negotiate.



Five Firsts

The things you didn't know originated in Sonic's 8-bit outings



PINBALL FLIPPERS

■ While everyone remembers Casino Night Zone on the 16-bit version of *Sonic The Hedgehog 2* for its pinball elements, fairly few know that the 8-bit version of *Sonic The Hedgehog* was in fact the first game in the series to actually include them – they appeared exclusively in the game's later special stages.



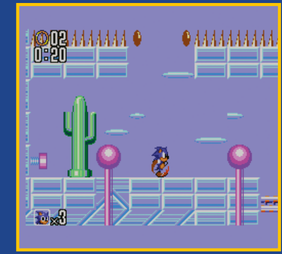
SONIC CD'S THEME SONG

■ Go back to *Sonic The Hedgehog 2* and listen closely to Green Hills Zone's theme, and you may just recognise it as a rendition of *Sonic CD*'s opening theme, You Can Do Anything. Mecha Green Hill Zone in *Sonic Chaos* runs it back, using a remixed version of the tune.



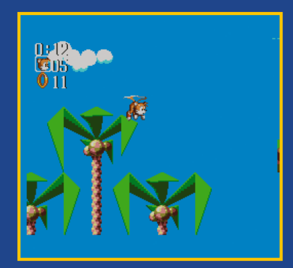
TAILS

■ That's right – as *Sonic The Hedgehog 2* arrived on 8-bit platforms before the 16-bit outing could hit the shelves, the game served as the debut of Sonic's vulpine sidekick. He wasn't playable in this outing, but when Master System owners finally got to control him they'd experience another first.



EXCLUSIVE FINAL STAGE

■ In the Mega Drive games, owners of *Sonic 3* who plug their cartridges into *Sonic & Knuckles* can access the exclusive final stage Doomsday Zone, if they have enough emeralds. A neat idea – and one which originated in *Sonic The Hedgehog 2*, with the Crystal Egg Zone.



TAILS' FLIGHT

■ While it was possible to see Tails fly on the Mega Drive, it was in *Sonic Chaos* that players were first able to control Tails while he was in flight. Perhaps for that reason, he controls a little differently to usual – you need to press up and jump to lift off, and Tails can hover without the player's input. Give it a try.

▶ that Sonic could do good work on its 8-bit platform too. The company didn't have the capacity to develop the game internally however, and instead entrusted the game to brand new developer Ancient.

The choice of a rookie company to handle a game featuring Sega's brand new hero might seem like an odd one, but it was made on a sensible basis. The team had been formed by the family of Yuzo Koshiro, who had established a relationship with Sega as a freelance composer on the Mega Drive hit *The Revenge Of Shinobi*. The Master System game was developed in tandem with the Mega Drive game, but it proved to be far from a simple conversion job. While the Master System game shares its character designs and some stage designs with the Mega Drive game, a conscious decision was made during development to differentiate the game from its 16-bit counterpart – unused fragments of code in the game show that work had started on the inclusion of enemies and music for Marble Zone, a Mega Drive stage which ultimately didn't appear in the Master System game.

While this meant more work for Ancient, it was a treat for players. The 8-bit version of *Sonic The Hedgehog* might have shared the most identifiable stage themes with the Mega Drive game – the Green Hill, Labyrinth and Scrap Brain Zones – but all three had new layouts and bosses. Three new stages also came in the form of the Bridge, Jungle and Sky Base Zones, and proved Ancient's aptitude for adapting the source material. The Master System couldn't hope to replicate the impressive speed and loop-de-loops that the Mega Drive version relied upon, but it's arguable that a stronger traditional platformer emerged because of those limits. Finding Chaos Emeralds required exploration of stages, and level design was more varied – the game's forced-scrolling stage in Bridge Zone, vertical ascent stage in Jungle Zone and maze stage in Scrap Brain Zone didn't have equivalents in the Mega Drive game. It was a little tougher too, thanks to the lack of rings in boss stages.

Sonic's Master System debut came in October 1991, roughly four months after the Mega Drive game had been launched to critical and commercial success, and met with similar reception. *Computer & Video Games*' 90% review advised readers to buy the game and "watch your mates' jaws drop, even if they have got Mega Drives." *Sega Pro*'s Les Ellis was no less effusive in his praise, awarding the game 96% and declaring it "as close as you are going to get to the perfect game." *Sonic The Hedgehog* proved to be a last hurrah for the Master System in North America, a territory in which the console had struggled to

» [Master System] Mine carts were the first vehicle in *Sonic 2*, and ran until they derailed.

» [Master System] The later stages ramped up the already punishing difficulty.

gain a foothold, and is now a rare collectors' item. In Europe however, it gave the machine a new lease of life. Soon after release, it replaced *Alex Kidd In Miracle World* as the built-in game for the Master System II, and helped to sell the hardware to younger and budget-conscious audiences for years to come.

Sega was quick to capitalise on the success, and quickly put a sequel into production. For *Sonic The Hedgehog 2*, development duties passed from Ancient to fellow young company Aspect. With the change of developer came a change of approach – while the Master System games would now employ additional aspects of the Mega Drive games such as destructible walls leading to secret areas and the iconic loop-de-loops, they were totally distinct entities in terms of story and game design. It was freedom which Aspect relished, and as early as 1991 the company was leaving its stamp on the series with the introduction of new elements, most notably the mine cart and hang glider vehicles.

In *Sonic The Hedgehog 2*, Robotnik has kidnapped Sonic's new friend Tails, and it's your job to rescue him. To aid in your task, Sonic is able to pick up a small number of dropped rings after he is hit, a welcome ability brought over from the Mega Drive games. However, Sonic's second 8-bit outing is widely regarded as being one of his most difficult, and not without reason. Mid-stage checkpoints are eliminated and while boss stages still don't give you rings, there are usually pre-boss hazards such as spikes, and the bosses themselves are tougher due to their nasty habit of launching you backwards into projectiles upon being hit. As if that wasn't enough, the Chaos Emeralds are now harder to obtain too, and missing just one during the game means you'll miss the final Crystal Egg Zone.

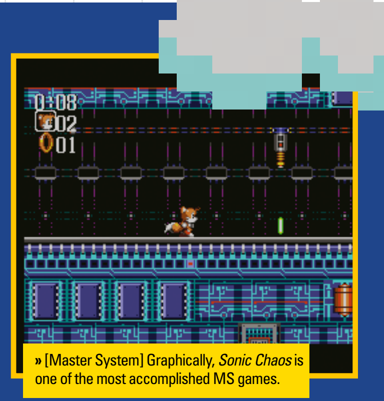
That high level of difficulty didn't seem to put off critics or fans when *Sonic The Hedgehog 2* arrived in October 1992, shortly before the Mega Drive game. Critics praised the improved visuals, with *Mean Machines Sega*'s Jaz Rignall noting the use of "brilliant sprites that wouldn't look amiss on the Mega Drive" in a 95% review. *Computer & Video Games* wasn't pleased that Tails was your buddy in distress rather than a playable character, but awarded the game 93% while also reserving praise for the improved visuals. The game hung around the Master System charts near-permanently afterwards, eventually being included in an official Master System II bundle alongside the built-in version of the first game.

With another success behind the team, a third game was put into production under the guidance of Aspect, which had secured a long-term place in charge of the major 8-bit *Sonic The Hedgehog* games. *Sonic Chaos* brought yet more of the 16-bit experience to Master System gamers, adding the iconic spin dash technique for both Sonic and his newly-playable sidekick Tails. Further, the game had

> **"Brilliant sprites that wouldn't look amiss on the Mega Drive"**
> Jaz Rignall



» [Master System] Rings are just far too abundant in *Sonic Chaos*.



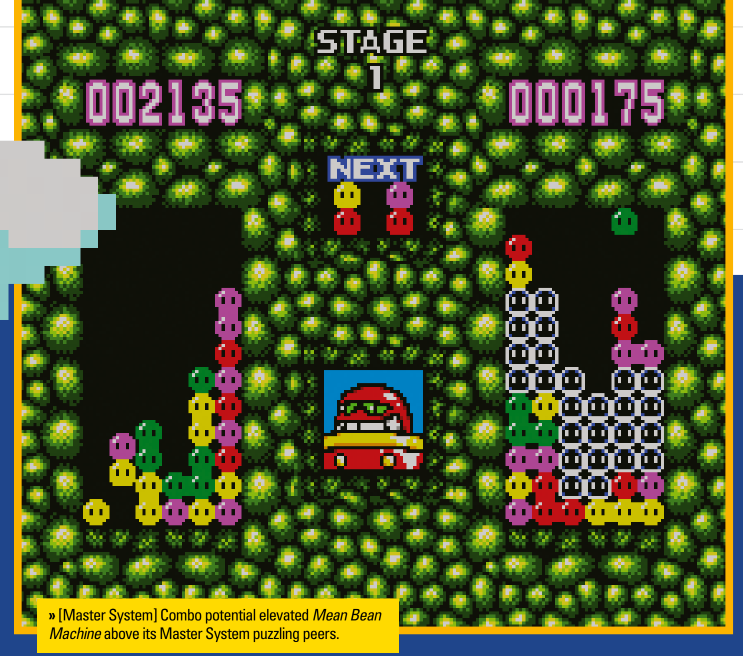
» [Master System] Graphically, *Sonic Chaos* is one of the most accomplished MS games.



The One That Got Away

Sega's handheld platform of the early Nineties, the Game Gear, shared most of its hardware and many of its *Sonic* games with the Master System. However, owing to its greater worldwide popularity, the Game Gear also had a number of exclusive titles – the two *Sonic Drift* racing titles, two spin-off titles starring Tails and *Sonic Labyrinth*, a slower-paced isometric adventure. None of these were a tremendous loss to Master System owners, but missing out on 1994's *Sonic The Hedgehog: Triple Trouble* stung. The Aspect-developed platformer was a direct sequel to *Sonic Chaos*, and featured the 8-bit debut of Knuckles as well as a new character, Nack. While it received a mixed critical reception much like its predecessor, Master System owners envied Game Gear-owning friends.

In recent years fans have produced their own conversion patch for the game, which converts the Game Gear game for the Master System. Colour entries are adjusted from the wider Game Gear format to the Master System's small palette and the screen resolution is increased, moving the heads-up display to match. This allows the game to be played almost as if it were a native Master System game. However, it's not quite perfect – there are various graphical issues throughout, with most being minor but noticeable issues of corruption and garbage data. Still, if you're looking for a way to enjoy the game as it arguably should have been released, there's no better way.



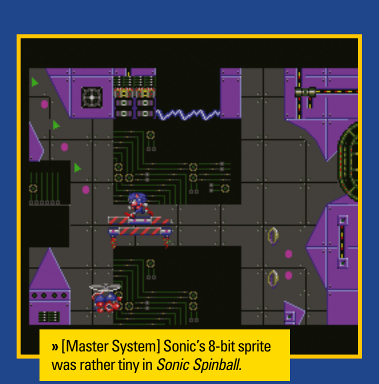
» [Master System] Combo potential elevated *Mean Bean Machine* above its Master System puzzling peers.

implemented new obstacles from those games, such as the corkscrew loop which provides a solid surface only to players running at speed.

The additions weren't all cribbed from the Mega Drive games, though. Sonic's rocket boots made their debut in this game, allowing the already-speedy critter to dash through the air at incredible speeds, often skipping much of the stage. Meanwhile, the pogo spring allowed for unlimited vertical travel so long as Sonic didn't get hit. As well as their appearances in the game's main stages, these power-ups would be particularly important in special stages, which returned after an absence in the previous game. These were generally based around gimmicks, such as a stage based entirely on rocket boots and a pipe maze, and for the first time on the Master System, awarded Chaos Emeralds for successful completion.

The special stages were tough, but this is something of a contrast to the rest of the game, which was significantly easier than both of its predecessors. Part of this was welcome change – while the bosses were not significantly more aggressive than before, they were far more manageable due to the inclusion of rings in their stages for the first time, and the challenges leading up to them were significantly fairer. However, the rest of the game suffered from an abundance of rings – as 100 were needed to enter special stages, regular stages were jam-packed with rings without the enemy count being similarly increased. Entering a special stage also counted as completion of the regular stage, making things even easier.

The result of this was that when *Sonic Chaos* arrived in the autumn of 1993, critical reception was for the first time somewhat mixed, with responses ranging from slightly positive to very positive. *Sega Pro* considered that the game didn't do enough to innovate over previous titles and was altogether too easy, awarding the game 69%. At the opposite end of the scale, *Sega Force Mega*'s Nick Roberts praised the new power-ups and high quality visuals, awarding the game 93%. Not that this hurt sales at all – *Sonic Chaos* immediately jumped to the top of the UK Master System charts ahead of rival platformer *The Jungle Book*, itself a strong contender during the gift-giving season. The game remained there for almost three months consecutively before


» [Master System] Sonic's 8-bit sprite was rather tiny in *Sonic Spinball.*


» [Master System] *Sonic Blast*'s stages offered plenty of exploration.

Spot the Difference

The features that helped 8-bit Sonic stand out

CHAOS EMERALDS



■ While the Mega Drive games featured special stages that held the Chaos Emeralds, the first two Master System games hid them in levels instead. Even when *Sonic Chaos* put them in special stages, those stages were more like standard platforming stages than the gimmick-focused 16-bit equivalents.

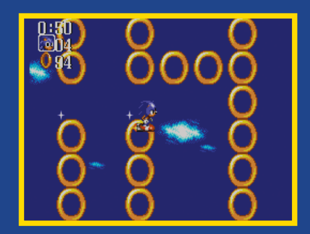
END POST BONUSES



■ On the Master System, passing the end post didn't just mean completing a stage – it could also mean a valuable bonus. Rings were a fairly common bonus, for sure, but if you satisfied some obscure conditions that varied from game to game, you might even find yourself earning an extra life.

> "These games offered rolling logs, gigantic bubbles and more"

MODES OF TRANSPORT



■ While Sonic could ride various types of moving platforms in the early Mega Drive games, the Master System games offered up rolling logs, gigantic bubbles, hang gliders and more. The difference was that these modes of transport gave players much more control than any of the 16-bit options.

EASY COME, EASY GO



■ Losing rings in *Sonic* games on the Mega Drive was a pain, but not the worst thing in the world – the first 32 would scatter to be gathered back up later. The first Master System game doesn't let you reclaim lost rings at all, and subsequent games were a heck of a lot stingier than those on the Mega Drive.

DEADLY DUELS



■ Neither of the first two *Sonic* games on the Master System give you rings during boss fights – one hit means that it's all over. Even *Sonic Chaos* briefly reprises this concept– Robotnik's final attack of the game will kill you regardless of how many rings you have, so it's an intense do-or-die situation.

finally being dethroned by the official Winter Olympics tie-in, and would remain a strong seller well into 1994.

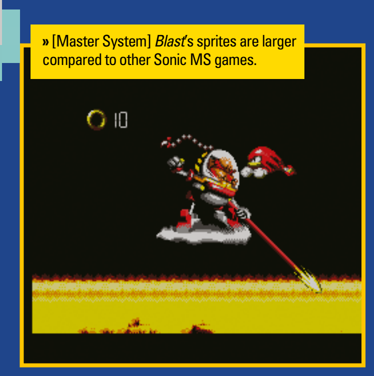
Unfortunately for Master System owners in Europe, *Sonic Chaos* was the last of Sonic's 8-bit platform outings to reach the region. That didn't necessarily mean that players were out of luck though, as two spin-off titles carried audiences through to the machine's discontinuation. The first of these to arrive was an oddity of the *Sonic* series, in that it didn't even feature the speedy blue hero. *Dr Robotnik's Mean Bean Machine* was a puzzle game, featuring Sonic's arch-nemesis in his new look from the *Adventures Of Sonic The Hedgehog* cartoon series, trying to enact a plot to process the beans of Beanville into robotic slaves using his titular machine.

If you think that sounds like the least obvious idea for a *Sonic* spin-off, we're with you – and in fact, the game wasn't conceived as a *Sonic* spin-off at all. *Dr Robotnik's Mean Bean Machine* was Sega's Western branding for *Puyo Puyo*, itself a puzzle spin-off of the Japanese RPG *Madou Monogatari*. But while this wasn't strictly a *Sonic* game, it was far from a bad game – the colour-matching puzzle gameplay offered more strategic depth than the likes of *Columns*, and the Puzzle mode featuring pre-defined problems kept players occupied for hours. Critical reception was positive, with *Sega Pro* awarding 90% and *Sega Power* going higher at 92%, but production was limited and the game didn't make a dent on the charts. As a result, Master System copies of *Dr Robotnik's Mean Bean Machine* are now prized by collectors.

The very last Sonic game to reach European Master System owners was *Sonic Spinball*, a conversion of the Mega Drive spin-off of the same name. In this game, Sonic mounted an assault on Robotnik's latest fortress – but this being a deadly pinball contraption, our hero found himself being shot all over the place to capture Chaos Emeralds and defeat enemies in such glamourous locations as sewers and boiler rooms. After years of Sonic forging his own path in the 8-bit world, level design was surprisingly faithful to the Mega Drive version.


» [Master System] Knuckles brought his moves from the Mega Drive games.


» [Master System] *Spinball's* design was close to the Mega Drive version.


» [Master System] *Blast's* sprites are larger compared to other Sonic MS games.

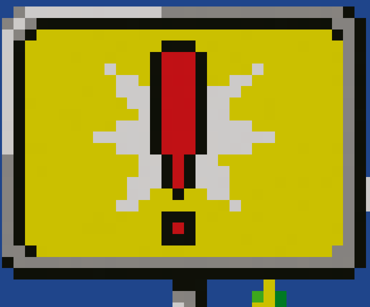
The 8-bit version did feature one significant difference from its 16-bit sibling, to be found in the bonus stages. Sonic's Mega Drive bonus stages had always been flashy hardware showcases, and *Sonic Spinball's* pseudo-3D tables were no different. The Master System version replaced these with platforming challenges instead, bringing Sonic too close to his comfort zone. Unfortunately, *Sonic Spinball* was never popular with critics on the Mega Drive, and the Master System version suffered from small sprites and slower gameplay. Critics were unimpressed ahead of the game's release in 1995, when the Master System was extremely close to discontinuation. The combination of a late release and poor reviews meant that the game didn't sell well. Like *Dr Robotnik's Mean Bean Machine, Sonic Spinball* is now a rarity, often fetching £50 - £100 on online auction sites.

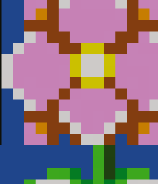


While *Sonic Spinball* wasn't a tremendous end for European Master System owners, it wasn't the end at all for Brazilian Master System owners. As international support dried up, local distributor Tec Toy still had an audience eager for Master System software and began converting Game Gear games in order to keep supplying it. Only one Sonic game received this treatment – *Sonic Blast*, another major platform game from Aspect. This starred Sonic and Knuckles, and offered advances from Mega Drive games. Sonic could perform double jumps, while Knuckles retained his skill for gliding and climbing walls. More surprisingly, the game opted to utilise pre-rendered character sprites, an approach that had served the likes of *Donkey Kong Country* well but seemed bold on an 8-bit platform.

Key staff from Aspect's previous Sonic games didn't work on *Sonic Blast*, and this shows. The game did offer positive aspects, including expansive stages and plenty to find within them. For the first time, poor control response and slow gameplay were issues. Beyond that, additional issues were introduced in the conversion process. Visuals were simplified for the Master System's palette of 64 colours, and pre-rendered sprites looked a lot better when drawing from the Game Gear's palette of 4,096 colours. While increased screen resolution made huge sprites less problematic, bosses and special stages weren't correctly recoded to use the whole screen, leading to odd situations such as projectiles being visible but unable to harm your character. While *Sonic Blast* is not the pinnacle of Sonic's quality on the Master System, its obscurity and rarity ensure that it often sells for over £100 – a real achievement for a disappointing game.

Looking at Sonic's time on the Master System, what stands out is how carefully Sega approached multiple platforms and their different capabilities. While Sonic Team delivered flair on the Mega Drive, Ancient and Aspect brought a unique vision of the mascot tailored for 8-bit hardware. Ultimately, that's what made Sonic an excellent hero – when the right people determined the challenges, he could adapt to overcome them. Sonic might have been conceived as the saviour of the Mega Drive, but his Master System outings made him a hero for every Sega gamer. ★







Archer Super-Deluxe Competition Joystick

» PLATFORM: VARIOUS **» COST:** £10+ (TODAY, BOXED), £5+ (TODAY, UNBOXED)

Few joysticks of the Eighties were as iconic-looking as the Quickshot II. It screamed quality from a distance and each movement made on it was confirmed by the reassuring click of its micro switch buttons. Archer were a range of joysticks sold in Radio Shack and were often based on well-known sticks of the time. It appears to be identical to the Quickshot II so it was either licensed with Spectravideo's consent or it's a very good clone.

Being virtually identical to Spectravideo's joystick it shares all the pros and cons of that popular peripheral. It's reassuringly good to hold in the hands and both of its fire buttons are easily accessible for your fingers. Four suction pads are found on the base of the device ensuring a strong grip when placed on a tabletop or book (for when playing on your lap). There's also an autofire function if you can't be bothered to constantly press those fire buttons. Compatible with a huge range of devices thanks to its Atari-standard port its only real issue is that twitch-based games don't feel as fun to play due to the travel in the joystick's shaft. We'd also advise against using it for games that require heavy waggle if you want it to last for any length of time. *



ESSENTIAL GAME

Combat

Archer's joystick is compatible with all manner of different systems, including the Spectrum, C64 and Amstrad, but we've been using it recently on the office's Atari 2600 (alright, Nick's 2600). While it's a little too slow for games like *Frostbite*, and we wouldn't dream of tackling some of the system's shooters with it, *Combat* has proven to be a very compatible fit for the joystick. It's a game that requires you to respond to your opponent's movements, but not in a way that you ever feel that the travel in the stick lets you down. In short, it's pretty much perfect.

COLLECTING QUICK

OUR LATEST COLLECTOR'S GUIDE FOCUSES ON QUICKSILVA'S SOFTWARE RANGE. FROM THE SUPER COMMON AND ULTRA RARE, TO THE UNUSUAL VARIANTS AND THE DOWNRIGHT OBSCURE. RICHARD BURTON PLUNGES INTO THE WORLD OF COLLECTING

In 1979 Nick Lambert founded the pioneering software house Quicksilva, the company name inspired by a track on the 1969 album *Happy Trails* by psychedelic rock band Quicksilver Messenger Service. While not as mysterious as Ultimate or rock'n'roll as Imagine Software, Quicksilva always had something of a cult following among gamers and collectors.

Quicksilva's first product was actually a piece of hardware, a 3K RAM card for the ZX80, and its first software release was *QS Defender* (later renamed *Defenda*) which required the aforementioned RAM card to run it. The shooter was head and shoulders above anything else available at that time. Nick continued, now aided and abetted by John Hollis, writing new ZX81 games with many enhanced by the company's own hardware products. The introduction of a sound board, character board and a motherboard to connect them together made ZX81 gaming unusually well defined and noisy.

Nick also wanted a more professional-looking end product. Rather than making do with a photocopied or Letraset-created inlay, Nick asked a friend, artist Steinar Lund, to create an airbrushed painting for *QS Defender* and soon more painted inlays followed – including superb artwork by Rich Shenfield and David Rowe.

Photo paper was used for the early batches of inlays but this was later changed to fully printed colour versions. Four ZX81 releases used these photo paper inlays – *QS Defender*, *QS Asteroids*, *QS Invaders* and *QS Scramble* – and the start of variation collecting hell began. Differences



» [C64] Quicksilva wasn't adverse to releasing the odd licensed game. This is *Rupert And The Toy Maker's Party*.

GAMES FROM
[QUIC]KSILVA



» *The Thompson Twins Adventure* game is hard to find on the Spectrum. It's nigh-on impossible to pick it up for C64.

in inlay, catalogue numbers, cassette and label colour changes and even keyboard overlays has since given completionists nightmares.

Quicksilva became successful, but that made it a target ripe for takeover. Argus Press Software, the software division of, well, Argus Press – which was part of the huge conglomerate British Electric Traction – moved in, and by summer 1984 Quicksilva had been absorbed.

So, what are the Quicksilva rarities and curios? Unsurprisingly, some of Quicksilva's earliest output are also the hardest to find. *QS Life* was the company's second release for the ZX80/81 and Printerface, a utility that allowed the use a Sinclair printer on an Acorn Atom, both sold in small numbers before being discontinued. Both are incredibly rare and would cost a Quicksilva aficionado £50 each.

Those early photo paper inlay versions of the ZX81 quartet of arcade clones should set you back £12 to £15 a game. The introduction of the black border inlays brought uniformity to the ZX81 line and while most are available for under £5, *Pioneer Trail*, *Blackstar* and *Ocean Trader* will fetch a little more.

COLLECTOR Q&A

Quicksilva collector, Henry Lambrick, talks about his Quicksilva hoard

How complete is your Quicksilva collection of games?

Apart from a couple of insanely difficult early titles, the UK collection is almost complete. *QS Life and* QS Harmony (on ZX80/81) and Printerface (for Acorn Atom) still elude me. There are also a few tape variants to locate (there are so many) and I also need to trade up my disk copy of *Black Thunder* (for the Commodore 64) as it's a little worse for wear.

What is the most that you have spent on a single Quicksilva title?

I've been extremely fortunate over the years in having picked up the majority of the games for just a few pounds including *The L-Game* which I got in a small bundle of games from eBay several years ago for 99p. The most I have spent on one game was £65 for a mint copy of *Dungeons Of Ba* (for C64) on disk. You just don't see them around and when you do, they usually make silly money.

For you, personally, what is the appeal of collecting Quicksilva games? What keeps you from stopping?

I grew up with Quicksilva games and some of my happiest childhood gaming memories are playing *Ant Attack* with my sister, who usually hated computer games, but as there was a female character option, joined in. I love the artwork on the inlays and would one day love to get an original piece of David Rowe's artwork. The games themselves are generally very playable and they also display well which for an OCD collector is an absolute bonus!

Do you concentrate your collecting efforts on software or include other Quicksilva memorabilia?

While hunting Quicksilva games you invariably find other interesting bits, and so I have various odds and sods I've picked up over the years – a 1983 calendar, a complete set of their ZX80/81 hardware add-ons, a complete set (all four) of the *Game Lord* magazines as well as the usual catalogues and pamphlets they distributed over the years. I've also managed to get a selection of sample reviewer copies and development tapes.

Is there anything Quicksilva related you would love to get your hands on?

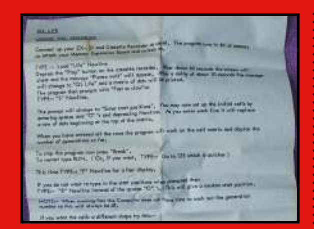
The Holy Grail would be the original *Ant Attack* art as it would, for me, have a lot of nostalgic value attached to it. However, that's unlikely. Software-wise I would really like to pursue a complete set of American releases covering the Sinclair Timex computers and the many C64 disk releases. They don't appear often and I'm not even sure how many were released.





TOP TEN RARITIES

Quicksilva titles that will make your wallet groan.



QS LIFE

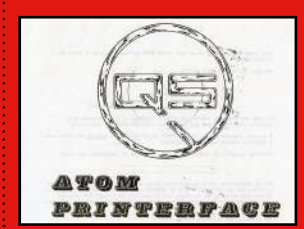
ZX80/81

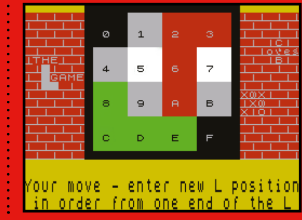
■ *QS Life*, a living cell simulation program which would allow you to create your own cell patterns and let them grow or fade, is a virtually unknown Quicksilva title. *QS Life* had minimal presentation with a printed instruction sheet wrapped around a tape with no inlay. This had a very short shelf (well, mail order) life. Expect to pay £50+ if you can find one.

PRINTERFACE

ACORN ATOM

■ Printerface was a utility which allowed printing from Acorn's home computer, the Atom, to the silver paper burning Sinclair thermal printer. Needless to say, very few of these sold as owners who simultaneously owned an Acorn Atom and a Sinclair printer could have arguably been counted on the fingers of one hand. Printerface is about £50's worth of rare.





QS HARMONY

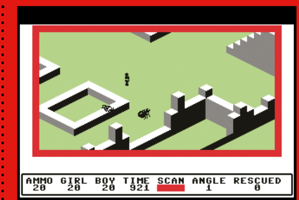
ZX80/81

■ You'd be forgiven for having not heard of QS Harmony because as a piece of software it was a very short-lived utility program written specifically to complement Quicksilva's own Soundboard hardware. QS Harmony was part-sound designer and a selection of impressive classical music demos. Should you find a copy, you'll be paying to the tune of £30+.

THE L-GAME

ZX SPECTRUM

■ The *L-Game* is by far and away the hardest of the Spectrum games to find due to its enforced withdrawal after Quicksilva infringed the copyright on a simple strategic puzzle game. It hadn't sold well even before the legal issues were raised, and as such *The L-Game* became an instant rarity leaving a hole in many Quicksilva collections. Don't be surprised to pay £50+ for this.



ANT ATTACK

COMMODORE 64 (DISK)

■ When is a Quicksilva release not a Quicksilva release? When it's an American Mastertronic rerelease. After the Argus Press takeover, this virtually-unknown rerelease of arguably Quicksilva's most famous title appeared as a North American-exclusive version, complete with entirely new artwork. And it could be yours for around £30.

> "THE HOLY GRAIL WOULD BE THE ORIGINAL ANT ATTACK ART"
>
> **Henry Lambrick**

For a ZX Spectrum rarity, look no further than *The L-Game* – all thanks to a copyright oversight. *The L-Game* is a simple puzzle created by Edward De Bono. However, Quicksilva assumed its new game was all its programmer's own work, only to later find the *L-Game* concept was copyrighted. Edward De Bono got in touch, it was immediately withdrawn and a £50+ future collectible was born.

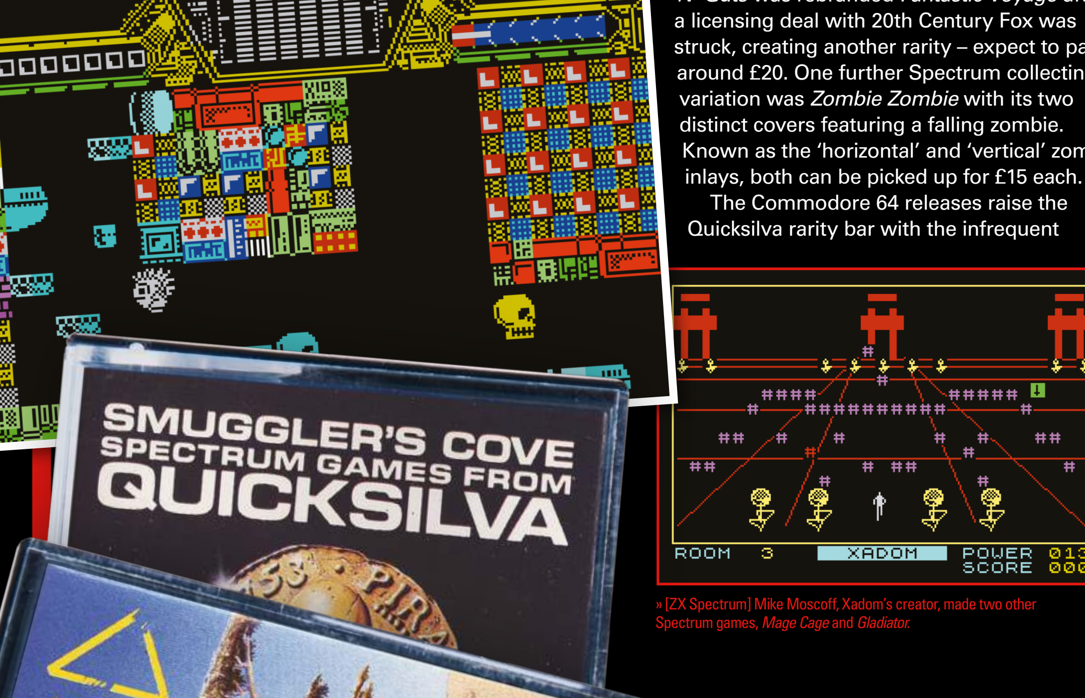
Suffering a similar fate was Quicksilva's speech utility, Speakeasy, which had to renamed Easyspeak after a company already using the name got in contact. Thankfully, both variations are easily obtainable for a few quid. Another name change occurred when *Blood 'N' Guts* was rebranded *Fantastic Voyage* after a licensing deal with 20th Century Fox was struck, creating another rarity – expect to pay around £20. One further Spectrum collecting variation was *Zombie Zombie* with its two distinct covers featuring a falling zombie. Known as the 'horizontal' and 'vertical' zombie inlays, both can be picked up for £15 each.

The Commodore 64 releases raise the Quicksilva rarity bar with the infrequent appearances of their UK disk versions. *Gryphon, Mean City, Black Thunder, Castle Of Jasoom, Doodle!* and *Dungeons Of Ba* are tough to find and will set you back £40-50 each. *Summer Games* is the exception, at around £20.

A handful of the C64 tape releases are surprisingly hard to locate such as *Magic Micro Mission, Seesaw* and *Traffic* and could cost you £10 each. However, the rarest of all is not a tape or disk but the flexidisc mailaway version of *The Thompson Twins Adventure*. While the gimmicky flexidisc Spectrum version was free with *Computer & Video Games* magazine, its C64 counterpart was only available by clipping out and mailing in a coupon. While a mint specimen of the Spectrum flexidisc should cost £20, the C64 version could cost you double that figure.

Elsewhere, the entire MSX range of Quicksilva games are all elusive and will cost £10-12 each. The VIC-20 also has a few tough to find titles, mainly the Pixel Production releases, which should fetch similar prices.

While games after the Argus Press takeover were of variable quality, there were still





» [ZX Spectrum] *Bugaboo The Flea* was created by Spanish coders Paco & Paco. It was also released on MSX, C64 and the Amstrad CPC.

ROOM 3 XADOM POWER 01313 SCORE 00030

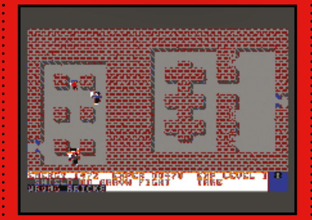
» [ZX Spectrum] Mike Moscoff, Xadom's creator, made two other Spectrum games, *Mage Cage* and *Gladiator.*



BLACK THUNDER
COMMODORE 64 (DISK)

■ *Black Thunder* is another game to fall in the hard-to-find C64 disk category and could be the most difficult of the lot to track down. While some games were disk releases, *Black Thunder* was also available on tape. So, when faced with a choice of formats, the tape version won out with the disk version of *Black Thunder* overshadowed, undersold and is now worth £50.





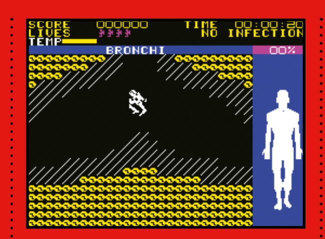
CASTLE OF JASOOM / DUNGEONS OF BA
COMMODORE 64 (DISK)

■ More big cased, floppy disked rareness for the C64 in the form of *Castle Of Jasoom*, a companion game to *Dungeons Of Ba*. The two graphic adventures are extremely similar in terms of graphics and gameplay but also in rarity and price. They could be yours for around £40 to £50 each.

THE THOMPSON TWINS ADVENTURE
ZX SPECTRUM/COMMODORE 64 (FLEXI DISC)

■ This was a Spectrum gift stuck to the cover of *C&VG*. The C64 version could only be obtained by sending away a coupon. The C64 version is super rare and should one surface will cost you about £40. The Spectrum version is nearer the £20 mark.





BLOOD 'N' GUTS
ZX SPECTRUM

■ Travelling around the inner workings of a human body sounds a lot like the premise of that old sci-fi movie *Fantastic Voyage*. Quicksilva thought so and obtained a licence to rename and rerelease *Blood 'N' Guts* as an official game of that film. The original *Blood 'N' Guts* was withdrawn creating another instant collectible. Expect to pay £20 for a copy.

VELNORS LAIR
ORIC

■ Derek Brewster's adventure was originally released on the Spectrum by the little-known software house Neptune Computing. Quicksilva was offered it a year later and not only was it rereleased, but later converted to the Oric 1 and Atmos – becoming the first of just two Oric Quicksilva releases, the other being *Mined Out*. A nice crisp copy could be yours for £20.



collectibles among the chaff. The C64 releases of *Romulus*, *Star Soldier* and *Mean City* are all difficult finds, while the Spectrum games *Tantalus*, *Sabotage* and *Death Wake* are equally rare and prices vary between £10 to £20 each. The Quicksilva name survived until 1989 touching the 16-bit era with Atari ST and Amiga releases of *Pac-Land*. You'll likely pay £20 for a copy.

For the hardcore Quicksilva collector there is a whole swath of repackaged games released across different territories. In the USA, several games were released for the Sinclair Timex 1000, 1500 and 2068 in oversized boxes. Many of the C64 UK titles received exclusive disk releases too with prices likely to be higher due to limited sales.

Spanish rereleases are also plentiful, many sporting different inlay artwork. *Investronica, Spectrum Magazine, Micro Byte,* and Monser rereleased several Quicksilva games for Spanish gamers. Monser's version of *Ant Attack*, known as *Anttown 3D*, bizarrely features a giant ape on the cover. Unusual and collectible they may be, but you don't need to worry about price: most can be picked up for just a few pounds or euros.

While certain games are hard to track down, a few are impossible. Three titles listed on Quicksilva's promos were highlighted for release and even given catalogue numbers but never quite made it to production. The non-appearing trio were *Games 84* (Spectrum), *Outpost* (Atari) and *Mined Out* (Camputers Lynx). So is it ever possible to have a *complete* collection? *

Special thanks to Mark Eyles.



» [ZX81] *QS Invaders* is an excellent little port of Taito's arcade hit., which was released in 1982.



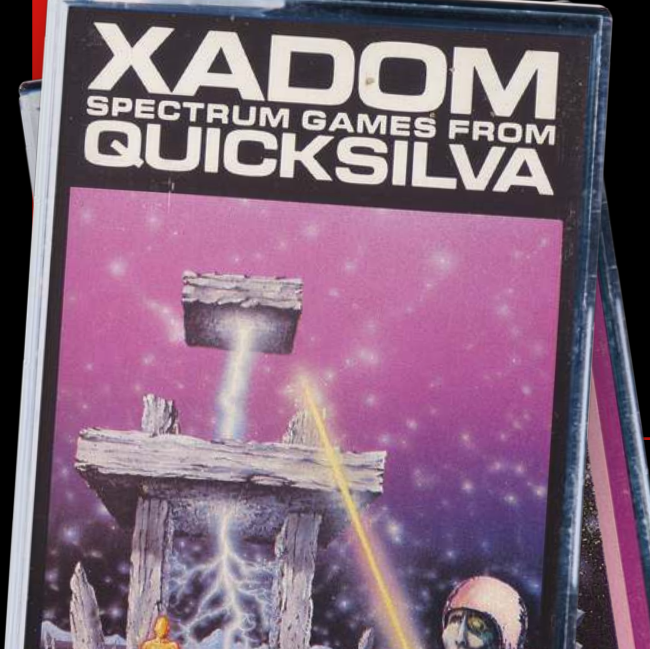
A run-down of all of the Quicksilva titles across all formats released. How many do you have?

SINCLAIR ZX81

- Black Star
- Cosmic Guerilla
- Croaka Crawla
- Damper/Glooper
- Galaxians & Gloops
- Munchees
- Ocean Trader
- Pioneer Trial
- QS Asteroids (first release)
- QS Asteroids
- QS Chrs Demo
- QS Defender (first release)
- QS Defenda
- QS Harmony
- QS Invaders (first release)
- QS Invaders
- QS Life
- QS Scramble (first release)
- QS Scramble
- Starquest
- Subspace Striker
- Trader

ZX SPECTRUM

- 3D Strategy
- Ant Attack
- Aquaplane
- Astro Blaster
- Battlezone
- Blood 'N' Guts
- Bugaboo (The Flea)
- Captain Kelly
- Chess Player, The
- Death Wake
- Defcom
- Dragonsbane
- Easyspeak
- Elevator Action
- Eric Bristow's Pro-Darts
- Fantastic Voyage
- Fred
- Frenzy
- Games Designer, The
- Gatecrasher
- Glass
- Glider Rider
- Gridrunner
- Hocus Focus
- Laser Zone
- L-Game, The
- Matrix
- Max Headroom
- Meteor Storm
- Mighty Magus, The
- Mined Out
- Pac-Land
- Power Pyramids
- Red Scorpion
- Rupert And The Toymaker's Party
- Sabotage
- Schizofrenia
- Sector 90
- Smuggler's Cove
- Snowman, The
- Softaid
- Space Intruders
- Speakeasy
- Strontium Dog – The Killing
- Tantalus
- Terramex
- Thompson Twins Adventure, The
- Time Gate
- Trader Trilogy, The
- Traxx
- Tube, The
- Velnor's Lair
- Word Processor
- Xadom
- Yabba Dabba Doo!
- Zombie Zombie (horizontal zombie inlay)
- Zombie Zombie (vertical zombie inlay)



COMMODORE 64

- 3D Tunnel
- Ant Attack
- Aquaplane
- Black Thunder
- Black Thunder (disk)
- Bugaboo (The Flea)
- Captain Kelly
- Castle Of Jasoom (disk)
- Death Wake
- Defcom
- Doodle! (disk)
- Dungeons Of Ba (disk)
- Elevator Action
- Escape
- Fred
- Glider Rider
- Glider Rider (disk)
- Gryphon
- Gryphon (disk)
- Hocus Focus
- Magic Micro Mission
- Max Headroom
- Mean City
- Mean City (disk)
- Pac Land
- Pac-Land (disk)
- Power Pyramids
- Purple Turtles
- Quintic Warrior
- Ring Of Power
- Romulus
- Rupert And The Ice Castle
- Rupert And The Toymaker's Party
- Sector 90
- Sector 90 (disk)
- See Saw
- Schizofrenia
- Snowman, The
- Softaid
- Star Soldier
- Sting 64
- Strontium Dog & The Death Gauntlet
- Summer Games
- Summer Games (disk)
- Thompson Twins Adventure, The
- Traffic
- Trashman
- Tube, The
- Ultisynth 64
- Yabba Dabba Doo

AMSTRAD CPC

- Death Wake
- Elevator Action
- Glass
- Glass (disk)
- Glider Rider
- Glider Rider (disk)
- Max Headroom
- Pac-Land
- Pac-Land (disk)
- Red Scorpion
- Yabba Dabba Doo!

BBC MICRO

- Beeb Art
- Drum Kit
- Gatecrasher
- Generators. The
- Mined Out

- Music Processor
- Protector
- Wizard, The

MSX
- Ant Attack
- Booga Boo (The Flea)
- Fred
- Games Designer, The
- Pac-Land
- Snowman, The

ACORN ELECTRON
- Electro Art
- Gatecrasher
- Mined Out

COMMODORE VIC-20
- Harvester
- Pixel Power
- Skyhawk
- Starquest
- Subspace Striker
- Tornado
- Trader

ORIC
- Mined Out
- Velnor's Lair

DRAGON 32
- Mined Out

ATARI XE/XL
- Magic Window

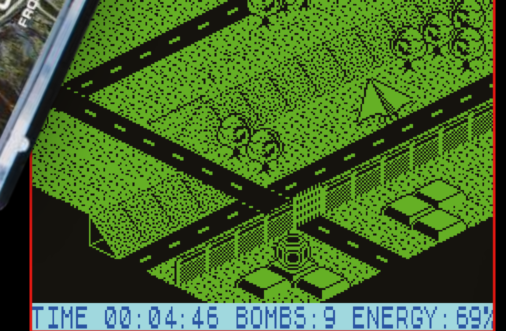
ACORN ATOM
- Printerface

COMMODORE AMIGA
- Pac-Land

ATARI ST
- Pac-Land

SINCLAIR TIMEX 1000/1500 (USA RELEASES)
- Black Star
- Croaka Crawla
- Damper/Glooper
- Munchees
- Pioneer Trail

SINCLAIR TIMEX 2068 (USA RELEASES)
- 3D Strategy
- Ant Attack



» [ZX Spectrum] Glider Rider is notable for its unique take on the isometric setting and a superb score by David Whittaker.

- Astro Blaster
- Bugaboo
- Chess Player, The
- Cybird Assault
- Games Designer, The
- Mined Out
- Time Gate
- Smugglers Cove
- Trader
- Traxx
- Velnor's Lair
- Xadom

COMMODORE 64 (USA RELEASES)
- Aquaplane
- Aquaplane (disk)
- Bugaboo
- Bugaboo (disk)
- Dancing Monster
- Dancing Monster (disk)
- Escape
- Escape (disk)
- Fred
- Fred (disk)
- Purple Turtles
- Purple Turtles (disk)
- Quintic Warrior
- Quintic Warrior (disk)
- Ring Of Power
- Ring Of Power (disk)
- Sting 64
- Sting 64 (disk)
- Trashman
- Trashman (disk)
- Ultisynth
- Ultisynth (disk)

COMMODORE VIC-20 (USA RELEASES)
- Skyhawk
- Skyhawk (disk)
- Tornado
- Tornado (disk)

ATARI 400/800 (USA RELEASE)
- Ulti-Sketch

> "THEY DISPLAY WELL WHICH FOR A COLLECTOR IS A BONUS"
> **Henry Lambrick**





Mega Drive

» **MANUFACTURER:** Sega » **YEAR:** 1988
» **COST:** £190 (launch), £15+ (today)

Sega leveraged its arcade heritage for its next-generation successor to the Master System, utilising the same processor setup as used in its versatile System 16 board. Although the processors were running at a lower clock speed in the home, the Mega Drive was still a fast machine for its time, capable of moving many sprites without slowdown. What's more, the Motorola 68000 was a familiar CPU for programmers due to its use in popular computers worldwide, including the Apple Macintosh, the Sharp X68000, the Commodore Amiga and the Atari ST. A custom graphics chip offered multiple independently scrolling graphics layers, a clear advantage over the rival PC Engine. However, its limited colour palette would prove to be a weakness in the long term.

Externally, the Mega Drive's black casing aped the design of expensive late Eighties hi-fi systems, aided by the presence of the headphone jack and volume slider. Gold lettering boasted of the machine's 16-bit power, and text on the circular rim around the cartridge slot touts high-definition graphics and stereo sound. Aided by clever marketing and stellar software, the Mega Drive would become Sega's most successful console and briefly made the company a market leader. *



Mega Drive fact

■ Some games didn't implement Sega's Trademark Security System (TMSS) correctly, including *Populous* (US version) and *Alex Kidd In The Enchanted Castle* (Japan version). These will only work on early versions of the original Mega Drive.

PROCESSOR: MOTOROLA 68000 16-BIT CPU (7.67 MHZ NTSC/7.60MHZ PAL), ZILOG Z80 8-BIT
CPU: (3.58 MHZ NTSC/3.55 MHZ PAL)
RAM: 64KB MAIN MEMORY, 64KB VIDEO MEMORY, 8KB AUDIO MEMORY
GRAPHICS: SEGA/YAMAHA YM7101 VDP, UP TO 320X480 DISPLAY (320X224 TYPICAL), 64 COLOURS FROM A PALETTE OF 512, 80 SPRITES ON SCREEN
AUDIO: YAMAHA YM2612 SOUND CHIP, SIX FM SYNTHESIS CHANNELS, PLUS TEXAS INSTRUMENTS SN76489 FOUR CHANNEL PSG
MEDIA: MEGA DRIVE ROM CARTRIDGE (UP TO 32 MEGABIT)

EDITOR'S CHOICE Sonic The Hedgehog

There would be no *Sonic* without the Mega Drive, and the Mega Drive wouldn't have been the success it was without *Sonic*. The game is expertly designed to highlight the strengths of the hardware – the high speed set *Sonic* apart from its more deliberately paced forebears, and the bold cartoonish graphics masked the system's difficulties with colour. Japanese pop icon Masato Nakamura's compositions were expertly translated to the YM2612 sound chip, too. With millions of copies sold the game is easy to find on its own or on compilation cartridges, and it was the Mega Drive's most iconic pack-in game.

MOONSTONE
A Hard Days Knight

Rob Taylor drinks mead with Rob Anderson and talk about baloks, blood and swords...



IN THE KNOW

» **PUBLISHER:** MINDSCAPE
» **DEVELOPER:** ROB ANDERSON
» **RELEASED:** 1991
» **PLATFORM:** AMIGA, PC
» **GENRE:** HACK-AND-SLASH, RPG

The finger-drumming, fidget-inducing drudgery of the loading screen has tested many a gamer's patience down the years. Not so with the 1991 Amiga title *Moonstone: A Hard Day's Knight*. These moments of downtime – illustrated via such portentous quotes as: "The gods pause for a moment to contemplate your fate," – were a chance to wipe down a sweat-soaked joystick and prepare for the carnage that awaited.

Not your typical Amiga title, *Moonstone* was a curious genre hybrid that's, surprisingly, never been revisited by either direct sequel or indirect imitator. It's a game of two halves – the first being a map-based role-player in which players manoeuvre the icon of their knight around a fantasy land in turn-based fashion, visiting lairs, battling beasts, pestering wizards, gambling away hard-gotten gold and so on.

Creator and lead artist/developer Rob Anderson admits this section is influenced by the cult board games *Talisman* and *Dark Tower* he and his friends played while growing up in Canada; other muses include Marvel's *Conan* comics, Edgar Rice Burroughs novels and sword and sorcery genre movies. "I was definitely setting out to make a new type of fantasy fighting game that combined both strong combat with RPG elements," he remembers.

Moonstone's world map is divided into four neighbouring territories – plains, wastelands, forests and wetlands, each being home to one of a quartet of knights. Up to four players could battle against one another, leading to some memorable multiplayer sessions littered with backstabbings, double-crossings, alliances and countless beheadings.

When your virginal quest knight enters his first lair, *Moonstone*'s second – darker – half announces itself in less than subtle fashion. It grabs you by the arm, rips it off and proceeds to beat you to death with it.

Combat is an arcadey, ultra-brutal and insanely unforgiving series of





2D, static screen knight-versus-monster, sword-versus-claws/spears/club/flame breath battles that fairly drenches screens in gore. Timing, strategy and lightning reflexes are key as limbs are severed, bodies hacked in two, corpses chargrilled and ripened yellow cornfields become claret-soaked charnel pits… and *Moonstone*'s true legacy becomes brutally apparent.

"I was definitely thinking of gore when I was animating the game, akin to a horror movie," reveals Rob. "Owing to the limited number of frames the Amiga's memory could handle, I conveyed the impact of combat through over-the-top violence. I also wanted to use gore to 'reward' players via comical finishing blows that would make players laugh when they died. I was a big fan of Interplay's *Battle Chess*, while another of my favourites was *Barbarian*. Towards the end of the game's development Mindscape actually assigned Richard Leinfellner (*Barbarian*'s producer) to the project, and he was the perfect fit."

Each of *Moonstone*'s lairs pits the player against an eclectic array of opponents, from lion-like trogg warbeasts to skull-faced mudmen. Arguably the most memorable, however, was a giant – seemingly invincible – red dragon who cruises the world map and snacks on hapless knights. In a sadistic twist, the more levelled up your avatar, the more foes the game throws at you, until the corpses are piled atop one another and the blood flows in red rivers.

"In terms of animation and the sheer amount of artwork within the game, we really wanted to push the envelope," explains Rob. "*Moonstone* was animated on paper, then ported over to Amiga by way of the EasyL tablet into Deluxe Paint. There were over a thousand drawings, and we rendered each and every one of them. I think doing it this way created the game's unique look and style; larger characters, more animation frames, new scripting languages… every action was choreographed to a greater extent than *Moonstone*'s contemporaries."

Is *Moonstone*'s gore over the top? Undeniably. Is it tasteless?



» Some of Rob Anderson's original concept sketches display his talent as an illustrator; it's no surprise the in-game visuals are so striking.

» [Amiga] Level your knight up and monster lairs upscale accordingly.



» Todd Prescott and Rob Anderson

The return of Moonstone?

How Rob Anderson is planning on returning his fantasy world

Rob Anderson has always maintained that he'd be interested in a *Moonstone* sequel. Indeed, he once had ideas around the game's quest knights being resurrected far into the earth's future to battle for the titular Moonstone once again! Perhaps it's no bad thing that particular idea never saw the light of day.

Instead, Rob is now planning to remake the original, building on the original game's strengths while taking advantage of modern processing power. Expect an expanded world map with more diverse environments, wider weapon and armour sets, expanded knight and monster attacks, block/riposte mechanics and more… all in glorious retro 2D. In other words: *D&D* meets *Mother Russia Bleeds*.

"Knights on horses is something I've thought about many times," muses Rob on his remake, "as well as more types of magic, curses and expanding on the final stages of the [original] game. Mindscape did ask me to write a design for a sequel, but it never moved past the word processor."

Fast forward more than 25 years and Rob is currently working on a brand new playable demo for audiences – much like a reimagining of the *Commodore User* Amiga cover disk featuring *Moonstone* from October 1991 – with the ambition that it'll be used alongside nostalgia for the original to drive a PC Kickstarter, with other formats (including PS4 and Xbox One) also under consideration if demand exists.

Head over to the Facebook group facebook.com/moonstone.official to keep up to speed with the latest announcements about the new project.



» Rob Anderson hopes to launch a Kickstarter for his remake.

“Usually wrapped up around 3am, or sometimes stayed up even later to call Mindscape”

Rob Anderson

» More of Rob's concept art, featuring early interpretations of the mudmen and troll.



▶ Possibly. Is it tongue in cheek? Absolutely. Rob cites *Looney Tunes* cartoons as a inspiration, while the game's evil black knights are a blatant tip of the hat to *Monty Python*. “I'm a big fan of Terry Jones and Terry Gilliam films, where lots of *Moonstone*'s dark humour stems from,” he admits. And the eyebrow-raising subtitle: *A Hard Day's Knight*? A quirky nod to The Beatles.

It seems the major publishers missed the joke. *Moonstone* initially seemed like it might have been the perfect fit for Mega Drive or SNES, but Mindscape's plasma-soaked pitch hit all the wrong notes. “The gore did hurt potential sales,” he muses. “Then Mindscape presented *Moonstone* to Nintendo and Sega. They loved it but said they could not release a title with so much blood. I pointed out our novelty ‘gore switch’, but no one wanted to take any risks,” remembers Rob. A year later, *Mortal Kombat* would challenge – and change – the way videogame violence was perceived forever.

M*oonstone*, however, certainly landed its blows when it came to atmosphere. A standout is late, great Amiga musical maestro Richard Joseph's dread-inducing funeral dirge that plays over each loading screen. The understated soundtrack was complemented via an intentionally sparse use of sound effects, ripped unashamedly from the *Conan* and *Red Sonja* Schwarzenegger flicks. Codeveloper Todd Prescott claims he was “blown away” by the quality and “loved the Peter Gabriel feel to it” while Rob concurs he “did a phenomenal job”.

There's no better example of *Moonstone*'s understated masterclass in terms of visual and sound design than the spine-tingling intro and outro, sequences acknowledged by gamers and critics alike as among the finest examples on the Amiga. Rob Anderson's skill and background in animation certainly contributed, as did his taste in videogame contemporaries. “Some of my favourite devs on the Amiga were Cinemaware, Pysgnosis, and the Bitmap Brothers,” he discloses.

“I really enjoyed *Defender Of The Crown*, *Rocket Ranger* and *It Came From The Desert*, with their great intros and cutscenes, plus outstanding graphics and animation. I also liked *Dragon's Lair* and *Space Ace*, mainly because of the animation. Generally, I always appreciated titles that took the time to create a memorable introduction while also ensuring that there was a great reward for players who'd managed to complete the game. I think, considering the budget, *Moonstone*'s intro and ending animations perfectly framed the experience.”

Moonstone's actual development is a classic example of madcap early Nineties project management in an industry still finding its feet. The youthful Rob toiled from home, pulling countless all-nighters to complete his labour of love. “It was my first title as an independent developer, and I undertook a lot of the project's artwork, animation and programming. *Moonstone* took close to two years to complete alongside a small team at various stages of the game who chipped in with art, music, engineering and production.”

“I usually wrapped up around 3am, or sometimes stayed up even later to call Mindscape in the UK and bring them up-to-speed on developments,” he reflects. “Programming took

Kill List

Who said living in a fantasy land is all gold pieces and mead?



Beheaded

■ Smash a rival knight to their knees and, with the right timing, you can neatly sever their head from their shoulders and watch it bounce playfully across the screen. It's oh so satisfying, and perfect when it comes to bragging rights over your mates in versus battles.

Hanged

■ The ratmen of the Great Forest are *Moonstone*'s canon fodder, and only the greenest knights will come a cropper facing them. However, they've got a cheeky sneak attack where they leap up into a tree and hang players in an impromptu noose.





Burned

■ Some *Moonstone* players genuinely believed the dragon was unbeatable, and with takedowns like eating quest knights whole or simply incinerating them it's easy to see why. Facing him without a Talisman Of The Wyrm? Ouch, don't say you weren't warned.

Gobbled

■ The fierce baloks of the Northern Wastes are huge, shaggy bigfoot-alikes with devastating right hooks and an instadeath jump stomp. Our ‘favourite’ death from these beasts, though, is being shaken into unconsciousness before having our heads bitten clean off.



place on my Amiga 2000 in 68000 assembly (Mindscape outsourced the eventual DOS port) and gameplay was often refined by way of trial-and-error – which I actually think is one of the better approaches to game development, as there is no way to determine fun unless you try it out, and then tweak it."

Meetings, meanwhile, were co-ordinated via a combination of phonecalls, FedEx, and a BBS board. Then, in the final throes of development, Rob travelled to England for a three-month in-house stint at Mindscape to wrap up testing, engage in some PR and help get *Moonstone* onto store shelves. It was a fun time. "Each of the knights (Godber, Jeffrey, Edward and Richard) were named after a group of friends I met at Mindscape that helped me get through the final development stages," he recalls with fondness.

Was Rob happy with the finished product, given its somewhat chaotic development? "I did want to portray visual differences between the knights as they acquired new armour, and swords," he admits. "I also envisaged a variety of types of knights with diverse fighting styles and attacks. This wasn't possible for several reasons, but the most significant were the Amiga's memory and loading times. Overall, I was pretty satisfied by the final game."

Play *Moonstone* today and, most would agree it has not only aged well – but also foreshadows contemporary pop cultural phenomena. Squint and there's a touch of *Game Of Thrones* about it, and there's a wiff of the *Souls* series in the narrative, too.

Why, then, back in 1991 did so many overlook *Moonstone*'s obvious qualities? Cast an eye over apathetic review scores in the likes of *Amiga Format* (72%: "slightly lacking in atmosphere") and Amiga Power (73%: "a near miss") and it's clear that, alongside its relative commercial failure, *Moonstone* was also a critical curate's egg. In a pre-*Mortal Kombat* world, its extreme violence seems to have shocked and dismayed the masses (it was banned in Germany and failed to find a distributor in the US), although the game did garner a following through the school playground disk-swapping scene.

Moonstone's legacy has become somewhat clearer in recent years, with initial notoriety evolving into a broader retrospective acclaim. Rob Anderson, who has largely remained in and around the games industry throughout his career – including stints with Sega and Sony – remains philosophical: "*Moonstone* was gratifying, enjoyable and exhausting to develop, and rather than the gore I think its real legacy was the way in which it merged elements of combat and role-playing in a unique manner."

Although *Moonstone* wasn't the financial success Rob and Mindscape had hoped for, he remains proud of what was achieved. "I regret that a sequel never got signed, but the industry was evolving at the time with consoles coming to the fore," he reflects. "I think in today's world it wouldn't be a problem; they might even have asked for more gore! Overall, I'm proud the game still maintains a loyal fan base."

Moonstone, then, remains as misunderstood as it is underrated. Almost a quarter of a century after its release, the game is garnering nostalgic acclaim online, as well as attracting some crazy prices for the Amiga boxed versions (often north of £500). Traction also begins to grow around the prospect of a Kickstarter remake, with Rob Anderson now fully committed to resurrecting Sir Godber and co for a new generation.

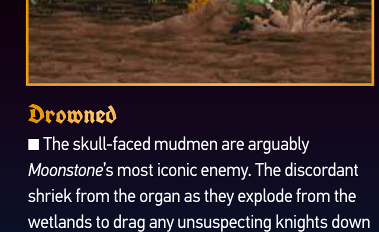
It seems, then, that the season of the Moonstone may once again soon be upon us. ✱

» [Amiga] *Moonstone*'s perfectly formed world map is a neat set of lairs, villages, shrines and wizardly hangouts.





» Some of the incredible fan art that *Moonstone* has inspired is testament to how high its stock has risen in the years following its 1991 release. These remarkable efforts are courtesy of professional concept artists Drawsome and Beastmaster Fred.



Drowned

■ The skull-faced mudmen are arguably *Moonstone*'s most iconic enemy. The discordant shriek from the organ as they explode from the wetlands to drag any unsuspecting knights down into the mire for a horrific instakill is traumatic, to say the least.

Splattered

■ These supersized trolls, complete with knight-sized clubs, combine devastating range with huge power. Their speciality execution is to gib quest knights into a thousand pieces via an unblockable overhead swipe. Dodging this dangerous attack is challenging.



Frazzled

■ The blue banshee is the ultimate guardian of the Moonstone, and the final obstacle between your quest knight and immortality. She's keen to lash knights with her kinky whip, but her best takedown is electrocuting players with 50,000 volts of pure pain.

Impaled

■ *Moonstone* features a couple of impalings, but our favourite comes courtesy of trogg warbeasts, vicious lions with horns that roam the misty moors. If you're low on health, they can spike you – your knight's corpse spasmodically twitching as it slides down said horn.





THE UNCONVERTED

Arcade games that never made it home

FLIP MAZE

DEVELOPER: **MOSS** YEAR: **1999** GENRE: **PUZZLE**

■ You might be of the opinion that there are quite enough cutesy puzzle games available on consoles, but we're not so sure – every so often, we find a game like *Flip Maze* that we'd really like to have at home. This game casts you as a little character who wanders around a board of tiles. Pressing a button makes your character swap the tile they're carrying with the one they're standing on – except that any tiles that are placed back down are flipped, showing a white background and jewelled emblem. Once three flipped tiles of the same type are touching, they disappear, revealing new tiles beneath and temporarily flipping any adjacent tiles with lightning strikes. With a little practice, it's possible to rack up some major combos by setting up favourable flips.

In the standard Endless mode, the threat comes in the form of ice blocks which can block off crucial tiles and eventually push you off the board. These can be cleared away with the lightning strikes caused by clearing tiles, or pushed around the board if there's a free space to push them to. This mode is fun, but it's the versus mode that really makes the game a forgotten gem. In this configuration, two players battle to push each other off the edge of their respective boards, sending ice blocks over to your opponent with massive combos. Tension ramps up quickly – in a heated battle, you'll often see ice blocks being pushed over the edge of the table on either side of the path you carved with your lightning bolts.

There's a lot to like here – the fine competitive play is well worth trying out, and we're fans of characters playing on the board itself, which seems to have become quite a popular theme in the Nineties with games like *Devil Dice* and *Kurushi*. Unfortunately, Moss games just didn't get conversions back in 1999. Still, the company at least made enough money off *Flip Maze* to make some of its more recognisable works, such as *Raiden III* and *Caladrius Blaze*.



■ These three jewelled hearts form one chain, which is the basic means of clearing tiles and making progress in this *Flip Maze*. Up to five tiles can be linked normally.

■ Even if they're under ice blocks, flipped tiles remain valid for chaining purposes, meaning you can almost burrow under the ice if you're playing particularly cleverly.



■ This gauge shows you how many ice blocks you're about to have to deal with – this isn't too bad. It's when the red ones show up that you're really in trouble.

■ You can see a group of tiles mid-flip here. Unfortunately, nothing is going to come of the mass-flip because they haven't got the adjacent flipped tiles to chain with.

CONVERTED ALTERNATIVE

MUSAPEY'S CHOCO MARKER

2002

■ Ecole is another developer that has never been the hot name on every gamer's lips, but *Musapey's Choco Marker* isn't a bad little puzzler – and like *Flip Maze*, your character directly manipulates the board. A decent Dreamcast conversion saves this game from unconverted obscurity.

PNICKIES

DEVELOPER: **CAPCOM/COMPILE** YEAR: **1994** GENRE: **PUZZLE**

■ If *Pnickies* looks a bit like *Puyo Puyo*, that might be because it's quite similar. Coloured blobs fall down in pairs and can be moved and rotated as usual, with blobs of the same colour joining up into one enormous mass. Occasionally, your blob will contain a star, and when two stars are present in the same mass, the whole thing disappears. Combos are possible from the resulting collapse of other blobs, too.



» [Arcade] Taking out this green mass will then cause a combo that also shifts the blue blobs. Do you see it?

The game soon becomes an exercise in building up huge stacks of a single colour. But this is a tricky balancing act, as you find yourself caught between disposing of excess off-colour pieces while still maintaining a safe area in which to dump the stars that might prematurely destroy your hard work. Excellent players can dispose of as many as 50 or 60 blobs at once, but you'll struggle to achieve that early on.

Pnickies didn't manage to get an arcade release outside of the Japanese market, which might suggest that it wasn't a hit in its homeland – either that, or Capcom didn't have confidence that it'd be worth a Western release. With a lack of other compelling reasons behind *Pnickies*' non-appearance in homes, we're guessing the former.

CONVERTED ALTERNATIVE

PUYO PUYO 2

1994

■ We wanted to put something else here, but Nick turned a funny colour and emitted steam until we backed down. You know the deal: match four blobs of the same colour and they disappear. Make combos and you send the other player garbage. Make big combos and *crush the saplings*.



CONVERTED ALTERNATIVE

SUPER PUZZLE FIGHTER II TURBO

1996

■ While the two games don't play similarly, *Toryumon* and *Super Puzzle Fighter II Turbo* both feature martial artists doing battle via block puzzles. They're also quite swingy games, as it's possible to turn a major attack back on your opponent with alarming ease.



TORYUMON

DEVELOPER: **JAMP/SEGA** YEAR: **1994** GENRE: **PUZZLE**

■ Here's a cute and seemingly forgotten Japan-only game. It's a falling block puzzle game in which the goal is to arrange falling pairs of tiles, so that the corners match up and form complete circles. As you do this, the character you chose at the beginning of the game does vague martial arts at an opponent whenever you hit a big attack.

This seems incredibly simplistic at first, but you soon realise that there are some subtleties to the system. It's possible (albeit tough) to set up combos, and to set up situations in which you form more than one circle at a time. However, the best way to deal a lot of damage is to turn your opponent's attack back against them. When you complete a circle, any adjacent nuisance blocks featuring your opponent's face turn into incredibly useful blocks featuring circle portions on every corner, allowing you to power through massive stacks of blocks in a flash.



» [Arcade] The left player has successfully survived an attack and turned the tables on the right player.

While it doesn't have the appealing colours of most puzzle games, *Toryumon* is a satisfying alternative take on a subgenre that has been thoroughly mined of ideas. It's a shame that nobody ever tried to produce a home version.

BEST LEFT IN THE ARCADE

PUZZLE KING: DANCE & PUZZLE

DEVELOPER: **EOLITH** YEAR: **1998** GENRE: **PUZZLE**

■ South Korean developer Eolith is best remembered for its collaborations with more established developers, and games like this make it clear why. *Puzzle King: Dance & Puzzle* doesn't make anything of its dance theme, leaving everything to hang on the puzzling. Unfortunately, the puzzle action suffers from mechanical overload.

The first button can be used to link two blocks of the same type, causing them to disappear and the blocks above them to fall, potentially allowing for a chain. However, there are rules as to which routes are acceptable for linking. New blocks fall onto the playfield sporadically, which can be controlled after you press the second button. Then there are a variety of power-up blocks including line-clearing items, paint buckets and more.

There's a lot going on, but it's never compelling as the elements all feel like they're fighting one another – why direct blocks rather than eliminating them? Why create combos? Why bother playing this instead of finding a better puzzler.



Take a classic shoot-'em-up series and drop the serious, and you might get something that's just a little bit like Parodius. Nick Thorpe looks back at Konami's classic blaster...

It's a shame that more developers don't engage in self-parody, as the results can often be quite interesting. Games like *Splatterhouse: Wanpaku Graffiti*, *Alex Kidd In Shinobi World* and *Star Parodier* all do some amusing things with well loved properties, but before any of those games, Konami unleashed *Parodius* upon the world in 1988. The first game in the series is often forgotten, as it was a Japanese exclusive for the MSX, but it set the template for what was to come.

CONVERSION CAPERS

Parodius is good on every format it was converted to, but how do they all compare? Let's find out...











NES
1990

■ There's sprite flicker, but *Parodius* is still a fine game. Working within the limitations of the hardware, Konami has packed in as much as possible, from items to level layouts. Some arcade stages are missing, but exclusive NES ones replace them.

GAME BOY
1991

■ Boasting big sprites to keep things recognisable, the Game Boy version has to make some pretty drastic level design changes. You'll have to contend with flicker and slowdown too, but it's a price worth paying for a good shoot-'em-up on such a limited piece of hardware.

SHARP X68000
1991

■ Given the power of this expensive computer, it's no surprise that this is a practically perfect version of the arcade game. Score and power-up info has been moved out of the way of the game area, and the horizontal resolution is slightly smaller. The sound is great, too.

PC ENGINE
1992

■ Here's a very good version of the game which is bright, bold and colourful. It's a step up over the NES version, but not as accurate as the later SNES version. Stage 5 and stage 8 are missing here, but an extra Special stage and exclusive bosses have been added to make up for it.

SNES
1992

■ The 16-bit console is the best of the early conversions, as all the levels are present and correct, with bonuses including a brand new bath house stage. It is graphically very close to the original, although not perfect – it has been redrawn to closely resemble its forebear.



The game took the design of *Gradius*, but featured a selection of playable Konami characters as well as bizarre enemies and stage designs, often with heavy nods to Japanese culture. Following the success of the MSX original, Konami decided to create a sequel named *Parodius Da*! (roughly "It's *Parodius*!"), released internationally as simply *Parodius* – and that's the game we're looking at here.

At its heart, *Parodius* is just like any other *Gradius* game – you control a flying character, you shoot enemies and defeat bosses, while tokens can be collected and spent on power-up items. The difference is that visually, the game has adopted the colourful aesthetic common to cute-'em-ups, like *Twinbee* and *Fantasy Zone*. The result is ridiculous. You shoot at a cat-headed pirate ship, marauding penguins or killer bees that pop out of treasure chests. Meanwhile, locations include a cartoon graveyard, a sunny shore and a neon-lit casino world. Most *Gradius* games feature the iconic Moai head

"AT ITS HEART, PARODIUS IS JUST LIKE ANY OTHER GRADIUS GAME"



PLAYSTATION
1994

■ This version came in a double pack containing the first two *Parodius* arcade games. This is almost arcade perfect, but has a slightly lower horizontal resolution – 256 pixels versus 288, which will upset purists. There's also a brand-new bonus stage here.



SATURN
1995

■ This is also part of a double pack. It also includes the new bonus stage and is almost arcade perfect, but the Saturn version offers a higher horizontal resolution – 320 pixels, versus 288, which gives a much wider view of the game's playfield.



GAME BOY COLOR
2000

■ This version, found exclusively on European copies of *Konami GB Collection Vol 2*, has been colourised but is otherwise identical to the Game Boy version. Given that it's backwards compatible with black and white hardware and contains extra games, we'd seek this one out first.



PSP
2007

■ This version was released as part of the Japan-only *Parodius Portable* compilation. As you'd expect, this is basically a perfect arcade conversion. Plenty of screen options are available, including zoom, stretch and even a choice between the arcade 288x224 and 'wide' 320x224 resolutions.



BOSS RUSH

While Parodius is a game filled with humour, some of its bosses are no laughing matter – here's a rogues gallery…

CAPTAIN PENGUIN NOHUSUKI III

DIFFICULTY: ●○○○○

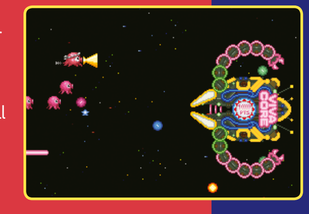
■ This guy's a pushover, as you might expect at this early point. He encircles himself with minion penguins, before sending them your way. Luckily, his weak point is easy to spot, as he reacts very noticeably when you hit his prominent belly button.



VIVA CORE

DIFFICULTY: ●●○○○

■ It looks just a like one of the regular Core bosses from the regular *Gradius* series, however in this case it's received a brightly coloured makeover and some defensive pinball flippers. In this case, looks do not deceive, so take out the wimp Viva Core with extreme prejudice.



EAGLE SABU

DIFFICULTY: ●●●○○

■ Dressed like Uncle Sam, this bird is significantly tougher than the first boss. Erratic movement patterns, rapid wave shots and slow-moving spreads of feathers are all likely to trip up novice players. All you can do is hang back and just keep shooting.



HONEY

DIFFICULTY: ●●●○○

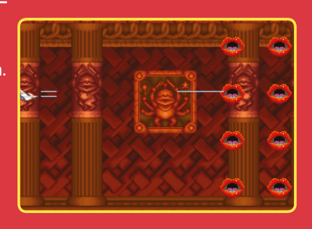
■ Honey is a large boss, but doesn't move around. However, she does blow odd pig-baby-gremlin enemies in bubbles and these are a bit of a pain to deal with, as they cover most of the screen and then start directly attacking you. If you're not quick in wiping them out, you'll be toast.



HOT LIPS

DIFFICULTY: ●●○○○

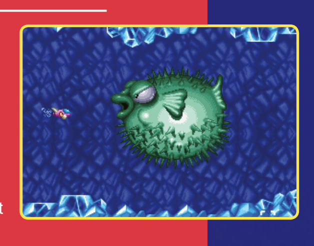
■ These mouths shoot razor-sharp teeth at you, which will track your ship around the screen. The mouths themselves also cross the screen occasionally. Circle behind the teeth to take them out, and the mouths will eventually retreat if you're not able to destroy them.



PUUYAN

DIFFICULTY: ●●○○○

■ This fishy fellow isn't too difficult to deal with. The main problem here is that you'll have to deal with is a lack of space. You see, as a puffer fish, Puuyan starts of fairly small in size but expands every time he takes damage. By the time he's near-death, he's blown up enough to take up most of the screen!



BUTA SHIO

DIFFICULTY: ●●○○○

■ A sumo pig that stomps about the place, causing lethal items to drop from the top of the screen. It's a familiar ploy, but the rate at which things drop shouldn't cause you any trouble. Hit him with your bombs if you're able, in order to speed things up a bit.



YOSHIWARA DAYUU

DIFFICULTY: ●●●●○

■ Before you can actually fight this ghostly enemy, it'll chase you around the screen as a deadly, and invunerable, cloud. This form is very fast and you'll struggle without speed power-ups. Luckily, its vulnerable form just fires easily destroyed blue flames at you.



YOSHIKO

DIFFICULTY: ●●●●○

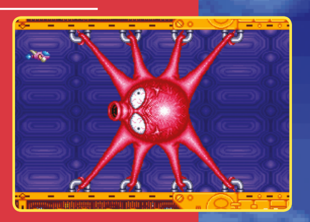
■ This Moai head is a bit of a pain, because the statues it fires out of its mouth are so large that they can be very difficult to avoid. Once a statue starts to travel vertically, pick a direction and commit to it. As for Yoshiko herself, you'll need to shoot her in the eye.



GOLGADO TAKO

DIFFICULTY: ●○○○○

■ A chump that doesn't attack at all, making him super easy to vanquish. Golgado Tako heavily protected from the outside, however, so make sure you pass the metal door before it snaps shut, but once you're in all you have to do is shoot his eight tentacles until they detach.





[Arcade] Any notion that *Parodius* is easier than regular *Gradius* is thoroughly proven wrong by these clowns in stage 2.

enemies, but *Parodius* gives you a full Moai battleship stage. The soundtrack is also great, featuring vintage Konami remixes as well as jaunty renditions of classical music favourites.

What's excellent about *Parodius* is that despite its sense of humour, it's no slouch when it comes to game design. Because it's primarily for people who love *Gradius*, it includes a variety of power-up styles represented in the four ships you can choose – Vic Viper, Takosuke, Twinbee and Penta correspond to *Gradius*, *Salamander*, *Twinbee* and *Gradius II* respectively. The level designs are just as challenging as anything you'll find in the main *Gradius* series, and offer a deal of variety. You'll find traditional stages, *Gradius*' characteristic infinitely scrolling stages and mazes, as well as the aforementioned Moai battleship.

"IT'S NO SLOUCH"

If there's one major criticism to be made of *Parodius*, it's that it sticks a little too closely to the *Gradius* power-up template, though it does improve on it in some ways. The adoption of *Twinbee*'s bell system is particularly nice, as whenever a bell appears on screen, you can shoot it until it changes colour for a variety of effects. The auto mode also takes out the stress of managing how you spend your tokens, delivering power-ups in a preferred order. However, as in *Gradius*, losing a life means starting from scratch, usually in an area that has been designed with the assumption that you'll be at full power.

For reasons unknown, Konami considered *Parodius* to be too offbeat for a North American release, but perfectly acceptable to release in European markets. NES and Game Boy versions were made available, but the SNES version was particularly popular with reviewers – the game scored 93% in *Mean Machines*, with reviewer Radion Automatic commenting that "the gameplay itself is nothing new, but it is presented in such an original way […] that it doesn't really matter." The SNES game also scored 87% in *N-Force* and 86% in *Super Play Gold*, with the latter stating that the game was important as it "almost single-handedly reintroduces the idea of playful fun to the shoot-'em-up."

Despite being packaged with a second game, the 32-bit versions were not as enthusiastically received due to reviewers' expectations of games on new hardware. *OPM* gave it 6/10, stating that "for all their weird and wonderful visuals, *Parodius* and *Fantastic Journey* are still side-scrolling shoot-'em ups – and not terribly 32-bit ones at that." *Mean Machines Sega* disagreed, awarding the game 90%. Gus Swan argued, "This game is a delight for shoot-'em-up fans, and a relief for Saturn owners who have put up with a barrage of concept games, too eager to experiment with the hardware at the expense of playability."

To get the *Parodius* arcade experience at home today, we'd recommend tracking down a Japanese copy of one of the 32-bit versions or the PSP version. Every home version has something unique to recommend it though, so you can't go wrong if you pick up one of the earlier console releases.

In today's hyper-controlled world of 'brand bibles' and complex character sign-off processes, *Parodius* feels just as vital as it ever did. It's a loving mockery of the *Gradius* series, which manages to ridicule the conventions of the games while simultaneously displaying great affection for them (and Konami in general). There are more than a few moments where you'll nerd out when you see a forgotten favourite character or enemy show up. Yet the game never forgets that its audience contains die-hard *Gradius* fans, and the design of *Parodius* respects that properly. Deservingly, the game has since seen many sequels and can be considered a game series in its own right, standing alongside *Gradius* rather than in its shadow.

So if you've never tried it before – something we can forgive, given the limited releases outside of Japan – you'd do well to give *Parodius* a go. You'll be surprised at how something so cute can reveal itself to be so fiendish.





Metal Gear Solid

A STEALTH HIT

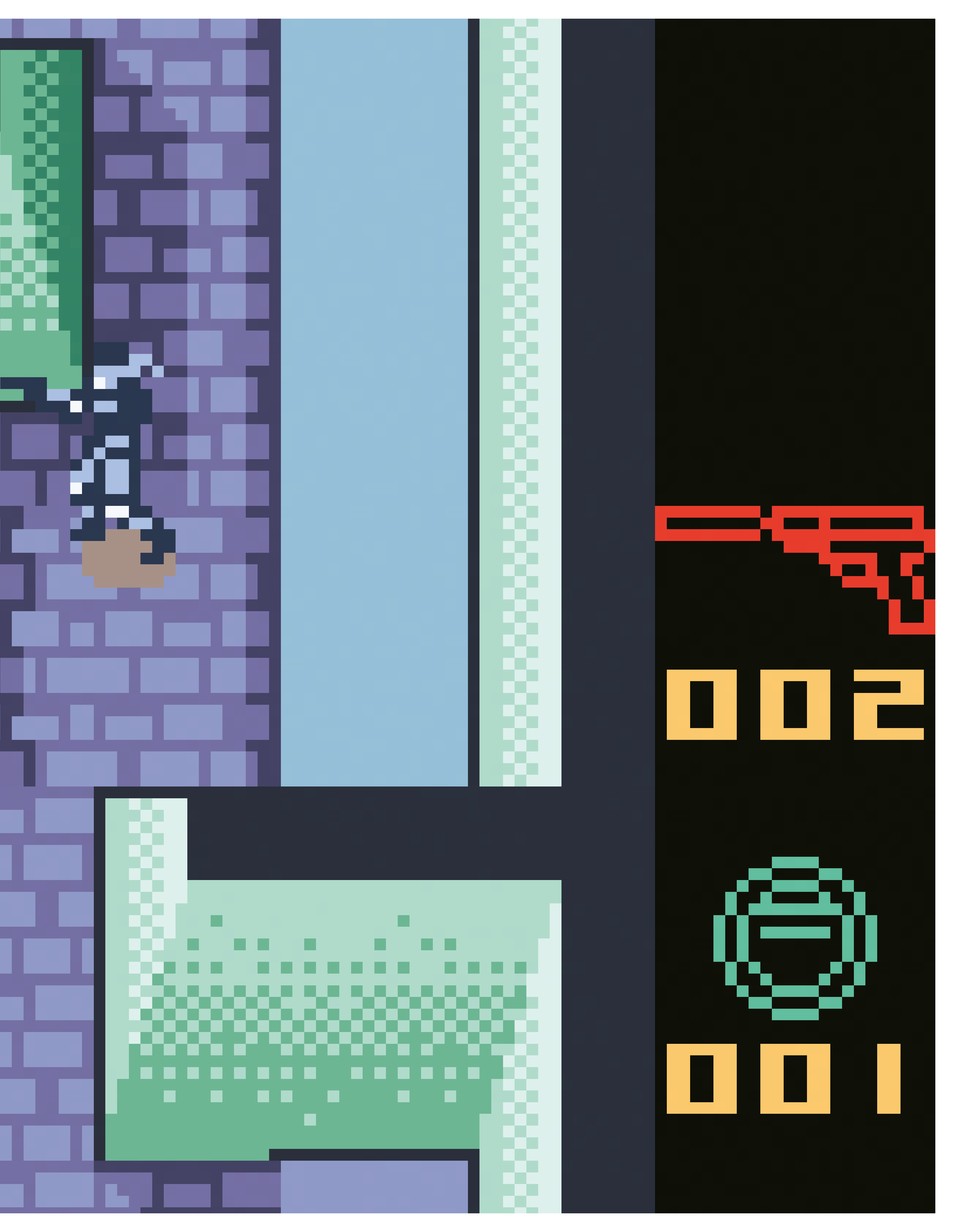
» GAME BOY COLOR » 2000 » KONAMI

I feel the Game Boy Color's library gets overlooked a bit. There were some absolute dross on it, sure – I had copies of *Robot Wars* and *The Grinch*, both of which could be classed as crimes against humanity in today's landscape – but there were also excellent games, like *Metal Gear Solid*.

This is named *Ghost Babel* in the US, and it serves as an alternate sequel to the MSX *Metal Gear*. That said, it does borrow a hell of a lot of stuff from the PlayStation *Metal Gear Solid* – Mei Ling, trying to identify a female soldier disguised as male, using smoke to find trip lasers and much more.

This makes it as kind of the ultimate *Metal Gear* game. It exists in a strange middle ground, bridging the top-down design of the originals and crossing it with tropes from the PlayStation games and beyond. It pleases everyone. Of course, Konami labelled it as non-canon in its nonsensical timeline, and the company has kind of swept it under the rug. And that's a shame, because the GBC *Metal Gear Solid* is a first-class game. Everything about it is great, from sneaking to the story.

So, Konami, what do you say? It can't exactly be he hard to pull those maddening story strings to legitimise it. Look, I can help: it exists in an alternate timeline which converges with the prime one, perhaps? Parallel Universes? It was all the work of The Patriots, Ocelot even? …Wait, who are those people in suits? What do you mean, 'I know too much'!? You can't do this to me! Hel- *


002
001

The Making of Aladdin

Despite a crushing deadline, Virgin turned Disney's Aladdin into a Mega Drive classic. David Bishop and William Anderson tell Rory Milne how the firm created its platformer in just over three months



ALADDIN 101

■ Far from a showcase of the cartoon-quality animation made possible by Virgin's groundbreaking Digicel process, *Aladdin* also innovates in game design with levels that combine horizontal platforming with vertical exploration based around fresh mechanics including levitating ropes, springy flagpoles and magic flying carpets.

» David Bishop was head designer on *Aladdin* and various other Virgin classics.

By the early Nineties, commercial pressures had transformed the UK games industry from a sector driven by lone developers into one that relied on large companies with global aspirations. Virgin Games was one such firm, having set up a Californian studio at the turn of the decade, and it wasn't shy about hiring British talent, as former Virgin US head designer David Bishop recalls. "We had some big UK developers of the time like Steve Crow and Dave Perry. They had been working in England, and we said: 'Do you want to come and live and work in California?' So we got them out, one after another, and formed this great team that ended up doing a bunch of different platform games."

But as well as platformers such as *Global Gladiators* and *Cool Spot*, Virgin's US arm was also working on a beat-'em-up intended to cash in on the *Teenage Mutant Ninja Turtle* craze, which ended up being instrumental to the studio securing an equally hot movie licence. "A guy joined us from the traditional animation world called Andy Luckey," David recollects, "and we were working with him on this *DynoBlaze* demo – *DynoBlaze* were these dinosaurs on skates. Then there was a company up in LA doing *Ren & Stimpy* – the first big show that used digital inking. So we were using traditional animation and then scanning and digitally painting the frames, and we were getting really good results. So part of our pitch to Disney was the *DynoBlaze* demo – to show what we thought we could bring to *Aladdin* to make it stand out from other games."



» [Mega Drive] Virgin used a demo of a project called *DynoBlaze* as part of its pitch for *Aladdin*.

However, due to a stalled attempt by Blue Sky Software, the *Aladdin* Mega



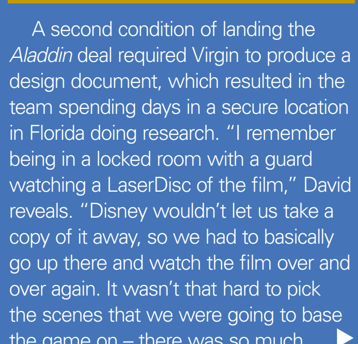
» [Mega Drive] *Aladdin*'s apples provide humour when thrown at overweight guards.

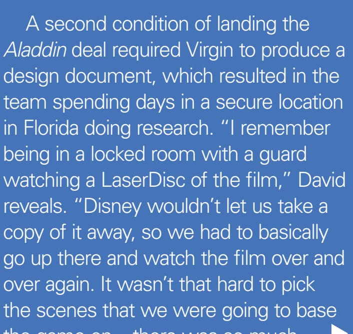


» [Mega Drive] The early levels in Aladdin have camels that spit at guards when they're jumped on.

Drive licence came with a tight deadline, as Virgin's lead level designer at the time William Anderson recalls. "What we were told by Disney and Sega was that they didn't approve of a thing that they were seeing out of Blue Sky, and they were getting pissed off with it. The reason that Disney and Sega brought it to us was that we had done *Cool Spot* in six and a half months, they had been spinning their wheels with Blue Sky and they wanted to have this out for the VHS movie release."

A second condition of landing the *Aladdin* deal required Virgin to produce a design document, which resulted in the team spending days in a secure location in Florida doing research. "I remember being in a locked room with a guard watching a LaserDisc of the film," David reveals. "Disney wouldn't let us take a copy of it away, so we had to basically go up there and watch the film over and over again. It wasn't that hard to pick the scenes that we were going to base the game on – there was so much ▶





"I remember being in a locked room with a guard watching a LaserDisc of the film. Disney wouldn't let us take a copy of it"

David Bishop

» William Anderson working on a level design during his time with Virgin Games.

Making A Scene

Key locations from Disney's movie that became levels in Virgin's game

AGRABAH MARKET

■ The market is where the film introduces Aladdin and Princess Jasmine. The game's first level riffs on this with elements like a bed of hot coals that Aladdin can trick guards into burning their feet on and its use of apples as a weapon.



SULTAN'S DUNGEON

■ Aladdin first encounters his nemesis Jaffar in the Sultan's dungeon, but Virgin produced an entire level based around this brief scene's backgrounds combined with creations unique to the game such as reanimated skeletons.

CAVE OF WONDERS

■ The genie's lamp and a magic carpet are hidden inside the movie's Cave Of Wonders, the latter of which Aladdin uses to fly over a sea of lava. Virgin's game has three distinct levels inspired by the iconic cave setpiece.



INSIDE THE LAMP

■ Arguably the movie's most memorable scene is the Genie's bombastic introduction. Virgin adapted this into a suitably strange level where Aladdin has to negotiate morphing Genie hands and floating Genie-head balloons.

JAFAR'S PALACE

■ The movie's finale takes place in Jafar's palace with Aladdin facing the villain's magic powers. In keeping with the film, Virgin's game also ends with their battle, in which Aladdin has to throw numerous apples at his opponent.





Adaptation Antics
The adaptations of Aladdin on other systems



SNES
■ The SNES *Aladdin* has little in common with the Mega Drive game, apart from the licence, Capcom's offering provides challenging platforming that's often compelling but rarely innovative.



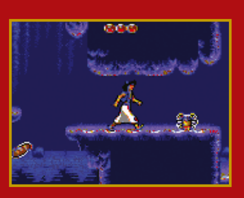
AMIGA
■ The Amiga *Aladdin* looks, plays and sounds like the Mega Drive original, except that its levels aren't fullscreen, its one-button joystick controls are awkward and its sound effects interrupt the tunes.



PC
■ Technically more faithful to the Mega Drive original than the Amiga conversion, *Aladdin* on the PC supports two-button joysticks and avoids the multiload and tune-interruption of its Commodore counterpart.



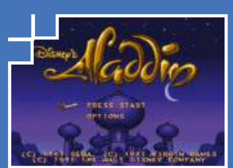
MASTER SYSTEM
■ Codeveloped by Sega, the Master System *Aladdin* looks great but lacks diversity. Unlike the Mega Drive original, Sega's 8-bit version is a simplistic platformer, although it's remarkably faithful to the film.



GAME GEAR
■ Identical to the Master System version, but with zoomed-in graphics for the smaller screen of the handheld, the Game Gear *Aladdin*'s levels and cutscenes recreate every key event in the movie.



NES
■ An ambitious but flawed attempt at emulating the Mega Drive original, NMS Software's *Aladdin* suffers from slow animation, flat backgrounds, stripped-back levels and a reduced colour palette.



IN THE KNOW

» PUBLISHER: Sega
» DEVELOPER: Virgin Games
» RELEASED: 1993
» PLATFORM: Mega Drive, Various
» PLATFORM: Platformer

"It was the most stressful game because it was three and a half months to get it done"
William Anderson

content in the film that it was more what we *weren't* going to put in. We got the whole design done in days."

Before finalising the deal, however, Disney asked to see Virgin's proposed designs for the first level of its adaptation, which didn't yet exist. "I was called into David Bishop's office because I was leading the gameplay design for *Jungle Book*," says William, "and he scared the crap out of me. He said, 'What are you working on?' I said, 'I'm working on *Jungle Book*.' He said, 'No you're not,' and gave me this long pause. I was pissing my pants, but he was like: 'You're now working on *Aladdin*. How do you feel about going home and coming back in the morning with a level design? We've got less than 24 hours to put a level on Disney's desk to get approval for the project.'"

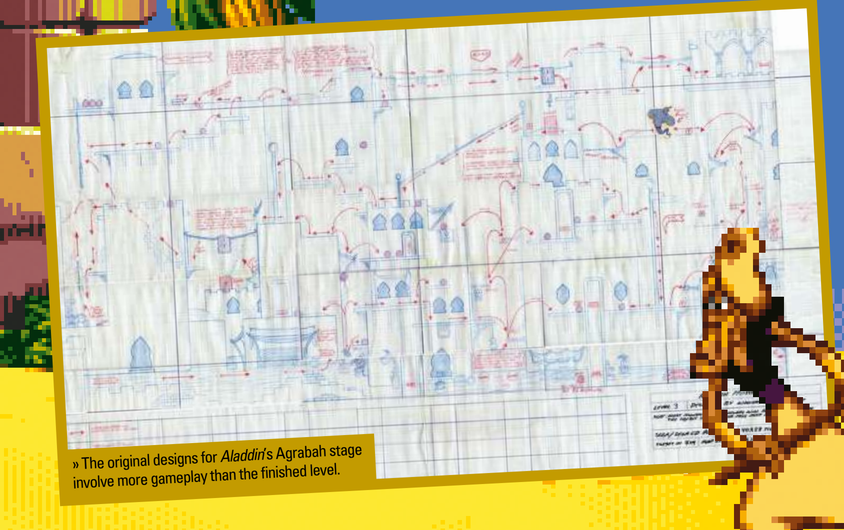
This time limit proved to be enough, though William concedes that a consignment of Disney assets made his task easier. "Disney gave me these long sheets of full-colour images; I think they were the scrolling backgrounds that it used for the movie. It was a lot easier thinking up level stuff when you could think: 'Okay, this is the environment.' I mean, obviously I had to break them up into a platform level system, but having those was key. So I came back with the first Agrabah level, Virgin sent it off to Disney and it signed off on it."

But where Disney played an oversight role on its licensed games, the studio viewed *Aladdin* as a chance to take a more hands-on role. "Disney was very into the idea of having its animators down in Florida that worked on the film being involved in the project," David notes. "Some of them took to it like a duck to water, and others couldn't get on with it at all, but what we ended up getting had such a different, fluid feel, because everyone had basically used Deluxe Paint until then. We had a talented animator called Mike Dietz liaising with them, and then there was a lot of reviewing and feedback before we got what we needed."

As Virgin's *Aladdin* team expanded across two states, the talented coder creating the game's engine found himself co-ordinating the output of the project's other contributors. "Dave Perry worked 16 hours a day," David discloses. "People would just come in and out of his office checking in code and assets, so he was very much the hub of the whole thing, but everyone on the team was best of breed."

A crucial member of the team was level and gameplay designer William Anderson, who reflects on the reasons for arming Aladdin with apples. "We wanted to add more action to it, and the idea of him throwing stuff really added to the game. Since we had come off *Cool Spot* – and because we were coming off of that game engine – it was just finding something to use as part of that same play mechanic instead of trying a whole new thing. So the apples were a long-range weapon, plus they reflected the theme of *Aladdin* being a street urchin."

Aladdin he was also given the means to get into sword fights. "Our focus was making a solid platform game in the


» The original designs for *Aladdin*'s Agrabah stage involve more gameplay than the finished level.



GAME BOY

■ An improved port of the NES *Aladdin*, produced by NMS Software. This port revives features missing from the NES version and adds better music. It also has its own border on the Super Game Boy.

GAME BOY COLOR

■ Although it plays identically to the Game Boy version, the enhanced GBC *Aladdin* runs faster than its counterpart, is flicker-free, sports redesigned backgrounds and boasts a more faithful soundtrack.

Aladdin world," William says, "so the sword fighting was just adding a little more energy to that. But no one sat down and said: 'We're going to have sword fighting be a major component of it,' it was just one of the components that we had."

A third weapon – of sorts – was subsequently implemented as William and his level design team added a camel that when jumped on would spit at and take down foes. "It was putting something in that was cute more than anything else," William argues. "We just saw the camels and thought: 'What can we do with those type of characters?' I forget who came up with the idea of jumping on them, but I think it came from one of the jokes that Robin Williams told in the cartoon – he said something about: 'Camels – they spit!'"

Equally humorous was a stage based on the *Aladdin* movie's inspired introduction of Robin Williams' genie. "We were quite pleased with how that turned out," David enthuses, "because it was a bit like the dream sequence in Dumbo. It was quite 'druggy,' and I think we did a reasonable job of capturing that."

Bonus levels were also devised for *Aladdin* – unlike the Virgin platformers that preceded it – including stages featuring monkey sidekick Abu and a power-up dispensing fruit machine. "The previous games we had done had a certain amount of repetition because we were doing one platform level after another without breaking," William concedes. "We realised from looking at games coming out of Sega that we were going to need more diversity. What we wanted to do was expand upon the product, but do it in such a way that we weren't creating levels that were going to take up too much time."

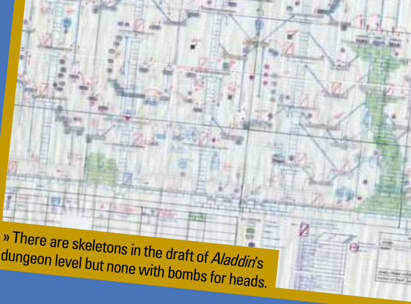
In fact, no part of *Aladdin*'s development could take too long, even down to the last minute testing done by Sega before giving approval for the game's release. "Normally when you submitted a game to Sega, Sega Of Europe would play the game and approve it, and then Sega Of America and finally Sega Of Japan." David explains. "But Sega actually had all three divisions playing *Aladdin* concurrently on different continents. They even had the Japanese people come in during a national holiday because time was pushing on."

Following *Aladdin*'s release on the Mega Drive alongside the home release of the movie, the game accrued sales in the millions and received top marks in many reviews, although David has bittersweet memories of its launch. "We always felt we could have done a better job if we had more time, but within the time that we had we felt like we had produced something that looked different, played well and paid homage to the film."

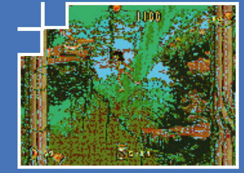
Looking back at *Aladdin* now, William Anderson highlights the game as his best despite the pressure involved in designing for it. "It was the most stressful game because it was three and a half months to get it done, but it holds up the best as far as my portfolio is concerned because it was the one that we did with the most diversity."

In closing, David Bishop can think of few changes that he would make to *Aladdin*, but he does sing the praises of the team that he created the game with. "I think it stands the test of time as well as any game has, and I wouldn't change that much. I don't think I've ever worked with a more talented bunch of people. I was just along for the ride in some respects, but it was fantastic." *

Thanks to David and William for sharing their memories.



» There are skeletons in the draft of *Aladdin*'s dungeon level but none with bombs for heads.



DEVELOPER HIGHLIGHTS

GLADIATORS
SYSTEM: MEGA DRIVE, VARIOUS
YEAR: 1992

COOL SPOT
SYSTEM: MEGA DRIVE, VARIOUS
YEAR: 1993

THE JUNGLE BOOK (PICTURED)
SYSTEM: MEGA DRIVE, VARIOUS
YEAR: 1994



» [Mega Drive] In a scene straight out of the movie, Aladdin leaps over a sea of flowing lava.

» [Mega Drive] The penultimate boss fight in Aladdin pits the protagonist against Jafar's feathered stooge Iago.



» [Mega Drive] A living, teleporting statue provides *Aladdin*'s Cave of Wonders stage with a tricky boss fight.

» [Mega Drive] To escape from the Sultan's dungeon Aladdin has to use moving masonry as stepping stones.



LOST IN TRANSLATION

How the rest of the world experienced your favourite games



JPN

ELEVATOR ACTION EX

JPN ➔ USA
Japan ➔ USA

ELEVATOR ACTION EX Departing: 2000

FORMAT
Game Boy Color

DEVELOPER
Altron

YEAR
2000

ORIGIN
Japan

LOCALISED FOR
USA

REASONS
Commercial



ECONOMY

Sometimes, we're frankly astonished by how licensed games get put together. It's one thing to retrofit a character into a game that might not yet have an established brand of its own, but it's quite another to take something with a proper heritage and slap some branding over the top. Yet that's exactly what happened when Taito revived *Elevator Action* on the Game Boy Color.

Elevator Action EX was an update to the original Game Boy version of *Elevator Action*, which had been released in 1991. The new version featured colour graphics, more stages, boss battles and a proper ending. There were also three characters to choose from, and intermission scenes. As always, the goal is to retrieve the secret documents from each building, gun down the bad guys and get out alive.

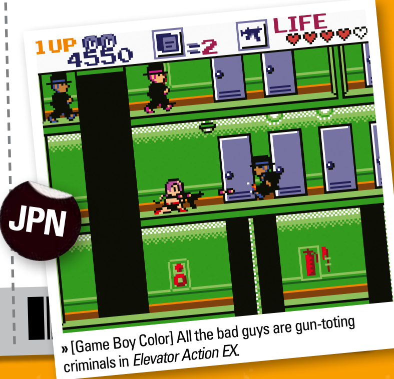
For some reason, when BAM! Entertainment brought *Elevator Action EX* to North American audiences, it decided that the best way to do it was to scrap the old arcade name and rebrand it as *Dexter's Laboratory: Robot Rampage*. Instead of being a secret agent searching for documents, American players got to be the diminutive genius, scouring his lab for codes to deactivate his robots. Why deactivate the robots? Because Dexter's dastardly nemesis Mandark had reprogrammed them to go crazy, of course.

The makeover replaces all of the enemies with robots, all of the player characters with Dexter (in different outfits) and alters some of the graphics to look a little bit more like Dexter's lab, with electronic instruments on the walls and such. The game actually looks a little more drab by comparison, as the blue and lilac backgrounds aren't as varied as those in the original game. Instead of your chief sending you out, instead you receive taunts from Mandark. Sadly, you don't actually get to duel Dexter's nemesis at the end of the game, instead fighting a generic robot.

We can only assume that the licence was applied in order to boost the commercial prospects of the game – *Elevator Action* was an old game by 2000, and the publisher would have likely believed that it didn't have much sway with the younger Game Boy crowd. We're not quite sure why *Dexter's Laboratory* was the licence it decided to go with, though. Fortunately, gamers in PAL regions didn't have to deal with all that nonsense, as the publisher TDK decided to bring the game to Europe under its original title, with the Japanese text translated to English, French, German, Spanish and Italian.



» [Game Boy Color] Mandark has turned Dexter's own robots against him in the American game.



» [Game Boy Color] All the bad guys are gun-toting criminals in *Elevator Action EX*.

GANBARE GORBY!

JPN ➔ ROW
Japan ➔ ROW

GANBARE GORBY! Departing: 1991

FORMAT
Game Gear

DEVELOPER
Japan System House

YEAR
1991

ORIGIN
Japan

LOCALISED FOR
Rest of world

REASONS
Political



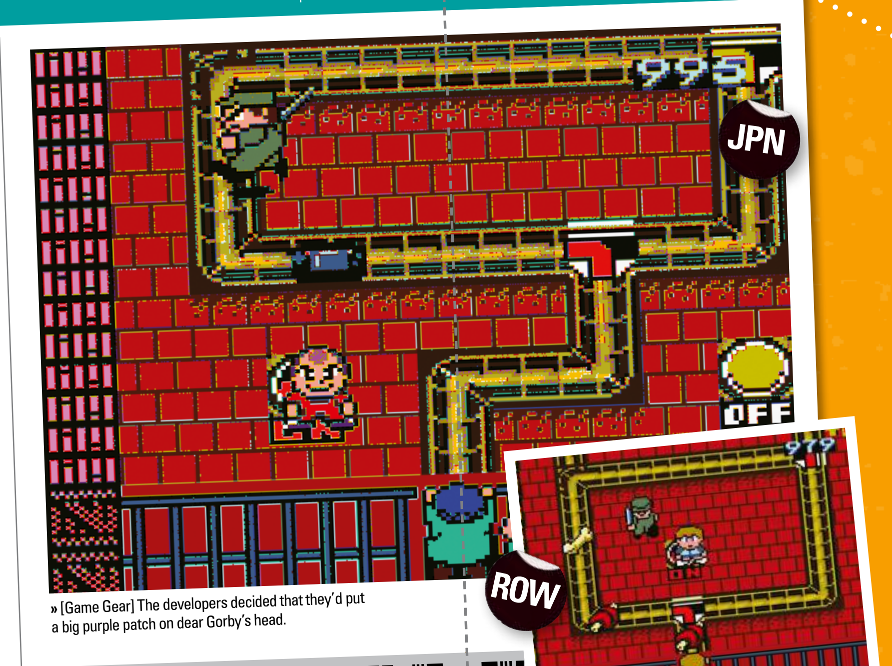


ECONOMY

It's 1991, and the premier of the Soviet Union is an embattled figure, struggling to save his country from imminent collapse. So how does the Japanese games industry show its support? By making a game in which a cartoon Mikhail Gorbachev personally goes into factories and distributes goods to the waiting proletariat. Yes, *Ganbare Gorby!* (roughly meaning ;Do Your Best, Gorby!;) saw players pressing switches to guide items on conveyor belts, while being chased by guards.

While Japan wasn't so sensitive about this, Sega wouldn't touch the game with a barge pole in North America. The European version altered the title screen and the main character's sprite to hide the original political content – Gorby's distinctive birthmark was replaced with a mop of hair, although the people receiving the goods were still Russian stereotypes. Whoever got the job of writing the manual for the newly-renamed *Factory Panic* decided that you were liberating goods from the factories of Mr Greede, who had been withholding food and Game Gears from the citizens of Segaville. The game was later renamed *Crazy Company* for the Brazilian audience.

You can understand the nervousness at the time, as the USSR had a nuclear stockpile of 30,000 missiles.



» [Game Gear] The developers decided that they'd put a big purple patch on dear Gorby's head.

» [Game Gear] Here's the blonde *Factory Panic* kid, here to save the people from capitalist greed.

SOULCALIBUR

JPN ➔ ROW
Japan ➔ ROW

SOULCALIBUR
Departing: 1998

FORMAT
Arcade

DEVELOPER
Namco

YEAR
1998

ORIGIN
Japan

LOCALISED FOR
Rest of world

REASONS
Commercial



ECONOMY

If there's one major problem for countries that were once major imperial powers, it's that the memories of imperialist aggression linger long after the empire has crumbled. Japan occupied Korea between 1910 and 1945, which understandably resulted in lingering hostility towards the Japanese in Korea. As well as relatively recent acts, people reached further back for examples of Japanese aggression, such as the samurai invasions of the late 16th Century. As a result, samurai imagery was not at all popular in South Korea, even as recently as the late Nineties.

All of this meant that Japanese samurai Mitsurugi was not a great fit for international audiences. Japanese and North American versions include him, but the world version replaced him with Arthur, a swordsman from Southampton. He'd forgotten his mother tongue having been adopted in Japan at the age of ten, but never found acceptance in that society. However, as attitudes have mellowed Mitsurugi has been able to appear in Korean editions of the *Soulcalibur* games, leaving Arthur as a forgotten quirk of localisation.



» [Arcade] Here's Mitsurugi, the character you know so well…

» [Arcade] And here's Arthur, his 'not Japanese, honest' samurai replacement.



Info

» **Featured System:** PlayStation 4
» **Year:** 2017
» **Publisher/Developer:** Housemarque
» **Key People:** Harry Krueger (director), Tero Tarkiainen (programmer) Eugene Jarvis (creative consultant)

Go Deeper

» Housemarque (originally known as Bloodhouse) has been making arcade-based shooters since 1993. Its first release was *Stardust*.

» In Nov 2017 Housemarque released a statement saying it will no longer make games like *Nex Machina*, *Resogun* and *Matterfall* due to poor sales.



» [PS4] *Nex Machina* pushes around an insane amount of visuals and the end results are an assault on the eyes.

NEX MACHINA

It takes a special game to receive a 100% score in Retro Gamer and Nex Machina is truly deserving of that accolade. Darran Jones explains how fortuitous timing led to gaming's best modern shooter

THE BACKGROUND

All games begin somewhere, and for *Nex Machina* that somewhere happened to be in the illuminated lobby of the Hard Rock Cafe at 4AM in the morning. Harri Tikkanen and Ilari Kuittinen, the cofounders of Housemarque, had been drinking and noticed Eugene Jarvis, who had recently won the Pioneer Award at the DICE Awards event they had attended. The pair's game, *Resogun* had been up for the award of best action game, but had ultimately lost out to *Bioshock: Infinite*. Despite losing out on an award, the nomination still proved important, as it put them within hand-shaking distance of one of the most revered designers of the Eighties arcade scene.

According to an interview in Engadget the pair walked up to Eugene Jarvis and said, "Hey, congratulations! We ripped off *Defender* – do you want to make a new game with us?" The ballsy ice breaker made quite the impression on Eugene and he went home and purchased a PlayStation 4 along with a copy of *Resogun*. After a few further discussions with Harri and Ilari about what *Nex Machina* could potentially be, Eugene excited the pair with the following simple email – "I'm very impressed. Let's fucking do it." And fucking do it they did…

THE GAME

From the moment you start playing *Nex Machina* Eugene Jarvis' influence becomes completely obvious. As you mow down countless waves of enemies, whilst expertly dodging through curtains of luminous bullets, you can almost feel his tangible presence in the game's design, as if he's personally willing you on to clear that next difficult stage.

Of course, Housemarque is no stranger to making acclaimed twin-stick shooters, having created the likes of *Super Stardust*, *Dead Nation* and *Alienation* among others, but *Nex Machina* feels like it's on a completely different level to the rest of its catalogue of hits. There's a frantic pace to *Nex Machina*, a raw primal energy that's just not found in the company's other games and it can't be a coincidence that the only difference that separates *Nex Machina* from them is the involvement of Eugene Jarvis.



» [PS4] Dodging in and out of enemy fire with the dash feels like a bullet ballet.

Things of note

TOUGH BOSSES
Each boss is worth the blood sweat and tears that goes into destroying it. A particular favourite is the one that's a direct nod to Donkey Kong.

LET'S GET PHYSICAL
A physical version of Nex Machina was available from Limited Run Games. While it's sold out, it's still easy to get hold of on auction sites.

VISUAL OVERLOAD
Nex Machina run on an enhanced version of the *Resogun* engine and utilises an insane amount of voxels. Some might find the action hard to focus on at first.



REVISITING ROBOTRON
Nex Machina's plot is virtually the same as *Robotron*'s but now you get to see what led robots to enslaving the human race via a slick opening cutscene.

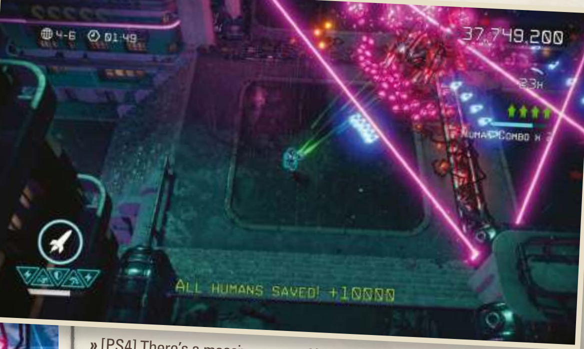
SONIC BOOM
One thing we should mention is *Nex Machina*'s pulsating soundtrack by that features scintillating work from Ari Pulkkinen, Thomas Nikkinen and Harry Krueger. Get it on vinyl to be extra cool.



In many ways *Nex Machina* is essentially an unofficial sequel to *Robotron*, or it's what *Robotron* would be like if it was made today and Eugene Jarvis has access to voxels instead of pixels. Either way, the end results are the same, an exhilarating twin-stick shooter that oozes quality and continually pulls you back for one more go.

But for those who've never had the pleasure of playing Housemarque's game, allow us to elaborate. It's set in a dark dystopian future where robots have grown in intelligence and enslaved the human race, leaving you as humanity's soul saviour. That's quite a big ask, but luckily you're avatar is more than equipped for the tough task at hand. In addition to being able to shoot in all directions he also has access to a useful *Resogun*-like dash attack, which offers brief invulnerability while it's in use. There are also a large amount of different weapons on offer (including a powerful melee attack) all of which instantly impact the playing field and are incredibly satisfying to use (something which was a particular issue with the weedy weapons of *Dead Nation*).

The levels of *Nex Machina* are purposely designed to take place on small cube-like arenas (there's a cool spinning effect as you move to the next level) that creates a sense of claustrophobia and fear. As a result you're always looking for the next space you can move into and with so many hazards to negotiate the ability to create safe spaces provides much of the game's enjoyment and strategy. While there are a set number of humans to be collected on each level (with a few hidden away in the destructible environments for good measure) you'll spend your first few lives desperately trying to stay alive, seemingly assaulted by the endless waves that *Nex Machina* throws at you. Eventually, though, you start to learn patterns and feel the beautiful rhythm of Housemarque's game. It's a game of ebb and flow, where you look for opportunities to exploit or simply make your own with a well-timed rocket blast. The beauty of *Nex Machina* is that it creates order from chaos if you're skilled enough and it's particularly apparent when you face off against the game's huge mayors, who



» [PS4] There's a massive wave of bullets that's about to swarm our plucky robo-slaying hero.



really come into their own on the higher difficulty levels. Ultimately, for us, *Nex Machina* is the essence of videogames distilled down to its purest form and it offers endless replayability just like its obvious influence, *Robotron*, does.

WHY IT'S A FUTURE CLASSIC

It's highly unlikely that any digital shooter will come close to the lightning in a bottle that *Nex Machina* is. Housemarque has already published a statement that it's moving away from arcade-based shooters, so if a developer with the experience that Housemarque has in the genre can't succeed with the backing of Sony and the assistance of one of the greatest experts within the genre then it's highly unlikely we'll see anything similar from any other would be challengers to *Nex Machina*'s throne.

Robotron: 2084 still works perfectly today because it's pure unadulterated action. All you do is move, think and shoot – nothing more, nothing less. And yet those straightforward mechanics have remained unchanged for over 35 years. It's too early to tell if *Nex Machina* will have the same impact as *Robotron*, but it shares the same modern niche, easily being this generation's equivalent of a pure twitch shooter. Housemarque may have left the arcade genre but it's left behind one hell of a videogame. *



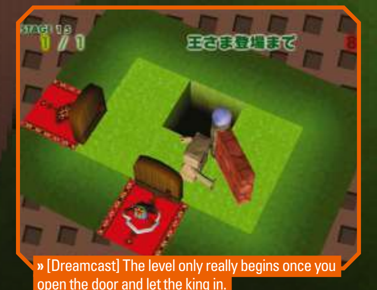
» [PS4] Each stage has a network of hidden areas to uncover.

Minority Report

INTERESTING GAMES YOU'VE NEVER PLAYED

DREAMCAST

The NTSC-U and NTSC-J Sega Dreamcast libraries harbour some really unique and interesting lesser-known titles. Here, Tom Charnock takes a look at a selection of games you might not be overly familiar with…



» [Dreamcast] The level only really begins once you open the door and let the king in.



» [Dreamcast] You'll encounter your fair share of oddities whilst guiding the king around.

THE LOST GOLEM

■ DEVELOPER: **CARAMELPOT** ■ YEAR: **2000**

■ **Sometimes, the story behind a game's creation is every bit as interesting as the game itself, and *The Lost Golem* definitely meets this criteria.** Released in 2000 by tiny Japanese developer Caramelpot, *The Lost Golem* is a puzzle game that looks fairly simplistic on the surface, but becomes insanely difficult as you progress through its stages.

Caramelpot was formed by a group of students who were studying various courses at Kyushu University in the late Nineties and *The Lost Golem* wasn't just the only title the team created for the Dreamcast, it was the only title Caramelpot developed before disbanding. The members of the development team went their separate ways afterwards and so this game represents the single title with a Caramelpot logo on the cover. In an interview with fan site LostGolem.com, lead developer Shuichi Ishikawa even goes as far as stating how disappointed he was with the final game.

Tellingly, *The Lost Golem* only sold around 500 copies at retail when it went on sale in Japan and due to this incredibly low figure, copies that do pop up online can fetch serious sums, especially when complete with spine card. Furthermore, you'd be forgiven for having never heard of this title, such is its scarcity. But what of the actual game itself? It goes a little something like this. You assume the role of the titular golem, and are tasked with assisting the king through a series of rooms in his castle. The king moves autonomously, walking forwards until he hits a wall or other obstruction, thus changing his direction. As a huge stone golem, you have the ability to push certain walls around with your gigantic bulk, creating a series of surfaces for the bumbling king to bounce off.

The main aim is to guide the regal idiot through the exit door and on to the next room, however things get tricky when you realise that you also have to have a certain number of these moveable walls connected to each other in order for the king to continue on his journey. Simply getting him through the door without meeting this 'linked walls' objective will mean you have to replay the same room. It sounds complicated, and it is. The opening stages ease you in to the mechanics of the game, presenting you with fairly simple puzzles, and as you progress new problems and traps are introduced. Walls that can be rotated around a pillar and walls that can only be pushed forwards and backwards

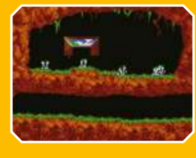
IF YOU LIKE THIS TRY...

MARBLE MADNESS
VARIOUS, 1984



■ This is really clutching at straws. However, *Marble Madness* rewards players for avoiding bottomless chasms, and also those who can successfully reach the exit of the stage, so some comparisons can be tenuously drawn. Probably requires more hand-eye coordination than *The Lost Golem* though.

LEMMINGS
AMIGA, 1991



■ It's hard to recommend games similar to *The Lost Golem* simply because it is quite unique in terms of gameplay and aesthetic, but *Lemmings* would be a good place to start. Guide your tiny autonomous minions to safety while giving commands and bequeathing specific abilities to members of the tribe.

BLAST CORPS
NINTENDO 64, 1997



■ If you swap the king in *The Lost Golem* for a runaway nuclear warhead, and replace the walls with city blocks and suburban housing developments then you get *Blast Corps*...sort of. Granted, *Blast Corps* involves destroying real estate for the benefit of the local population, but there are similarities.





» [Dreamcast] The Lost Golem didn't sell well at all, and now copies fetch mad money on auction sites.

make what was already a pretty brain teasing experience the Dreamcast equivalent of a Mensa test. There are 100 or so rooms to traverse, and once you beat the main game a two-player mode and a create-a-stage option are unlocked, meaning the number of potential stages is almost infinite. *The Lost Golem* really is one of the best puzzle games on the Dreamcast, but also one that a criminally small number of people will have even heard of, let alone played. If you're lucky enough to find this one for a reasonable price, you'd be advised to pick it up.

IN DEPTH

STAGE 1 4
1 / 3
王さま登場まで

KING
■ The king turns right if he hits a wall. If he can't go right he'll go left, and if he can't go left he'll do a 180-degree spin.

GOLEM
■ This is you. A big golem with great strength. You can push walls and open doors and must guide the bumbling royal to safety.

WALLS
■ These moveable walls are your main tool in the battle to get the king through the stages. Some can be rotated on an axis, others only pushed forwards and backwards.

DOORS
■ You need to physically open each exit door otherwise the king will just bounce right off it! The royal buffoon.

Minority Report

MARS MATRIX

■ PUBLISHER: **TAKUMI CORPORATION** ■ YEAR: **2000**



» [Dreamcast] The variety in the enemy ship designs in truly inspired, and when they finally succumb to your fire they explode spectacularly.

» [Dreamcast] The boss battles are worthy of note. Most of the bosses are gigantic, screen-filling monstrosities but they all have weak spots.

■ **The Dreamcast is a total beast when it comes to shoot-'em-ups, and so to stand head and shoulders above the cream of the crop is a true testament to just how good a particular title is.** *Mars Matrix* is one such game, and while it isn't a true exclusive (it was also released in arcades on Capcom's CP System 2 board); as far as home ports go there is no other way to play this superlative shmup on console.

Straddling the line between 'bullet hell' and a traditional arcade shooter, *Mars Matrix* is perhaps one of the greatest examples of an arcade-to-home port, with a glut of extra content added to the Dreamcast game that wasn't present in the original arcade version. Initially, you're asked to choose one of two craft and battle against an almost infinite and unrelenting armada of airborne enemies, but where *Mars Matrix* takes a diversion is in its weapons system.

You aren't awarded power-ups for taking out enemies, but you do have a fairly robust system in place from the off and the only restriction is your own ability. Hitting the fire button unleashes a constant stream of projectiles, but laying off the trigger allows for a short-range armour piercing blast. Further to this, holding the 'charge' button allows you to capture enemy projectiles and then send them back from whence they came, usually with devastating results. You're also encouraged to collect golden cubes which act as currency that can be spent in the game's shop, and this yields a remarkable amount of extra content and modes for a blaster that existed long before the blight of DLC infected the gaming sphere. *Mars Matrix* is a game every Dreamcast owner should play.

MORE GAMES TO PLAY



» PLUS PLUM

■ DEVELOPER: **TAKUYO** ■ YEAR: **1999**

■ An intriguing take on the 'match three colours' puzzle genre, *Plus Plum* introduces the need to also have a working knowledge of the Weights And Measures Act in order to progress. Coloured balls (or plums) fall from the top of the screen, and they have an associated weight value. Connect three, and they vanish, but not before lightening your side of the scale. It sounds complicated, but in execution it's actually a very curious (and fun) take on the genre.



» GUNDAM SIDE STORY 0079

■ DEVELOPER: **BANDAI**
■ YEAR: **1999**

■ The *Gundam* franchise hit the Dreamcast in 1999 with Bandai handling development and publishing. *Side Story* places the player in the role of a commander as a war rages across the Australian mainland. The game's presentation is second to none, and missions are varied and intense. Fully destructible environments married with combat in giant mechs – what's not to like?



» NET DE TENNIS

■ DEVELOPER: **CAPCOM**
■ YEAR: **2000**

■ *Virtua Tennis* is the Dreamcast's flagship tennis series, but in 2000 Capcom released *Net De Tennis* as an alternative to Sega's arcade juggernaut. Looking more like *Super Tennis* with 2D sprites and simple yet addictive gameplay, it was released as a budget title intended to be played online, hence the lack of any real single player modes. That said, as a local multiplayer tennis game, it's practically flawless and great fun.



» FRAME GRIDE

■ DEVELOPER: **FROM SOFTWARE**
■ YEAR: **1999**

■ Way before turning their collective hands to the more macabre and horror-themed *Demon's Souls*, *Dark Souls* and *Bloodborne* games, FromSoftware gave Dreamcast fans a very small taste of what was to come in the form of *Frame Gride*. While the game is more of a *Virtual On* homage, with robots battling in enclosed arenas, the overly Gothic aesthetic is clear to see in the menus, audio and the designs of the battling mechs.

SUPER SPEED RACING

■ PUBLISHER: **ZOOM INC** ■ YEAR: **1999**

■ An early release for the Dreamcast, *Super Speed Racing* captured the pomp and circumstance of the American CART racing, delivering it in a nice little package to Japanese gamers several months before Dreamcast owners in the USA.

Featuring all of the drivers and officially licensed circuits from the now-defunct motorsport series, *Super Speed Racing* (known as *Flag To Flag* in the United States) was the first true racing simulator to grace the Dreamcast. And while not very well known outside of the NTSC localities, it is easily one of the most enjoyable open-wheel motor racing titles on the system. *Super Speed Racing* may look fairly basic by today's standards, but back in 1999 it was leagues ahead of anything on the Nintendo 64 or PlayStation in terms of looks, It isn't as well known as the latter console's *Newman Haas Racing* or the former's Indy Racing 2000, but *Super Speed Racing* trumps them both in terms of that race day atmosphere, responsive controls and seat-of-the-pants arcade thrills.

Many of the circuits are typical ovals seen in US-based racing, but that's not to say the races aren't engaging and fun – and when played from the cockpit view the sense of speed is great. A superb example of an early Dreamcast racer done well.

"It was leagues ahead of anything on the N64 or PlayStation"



» [Dreamcast] Not the most visually stunning racer on the Dreamcast, but races can get very heated – just don't hit the walls or other cars!

» [Dreamcast] You get to race on real tracks against real drivers from the 1998 CART championship.

RETRO STINKER

» THE RING: TERROR'S REALM

■ ASMIK ACE ■ 2000

■ Loosely tied to the horror franchise, this is a third person survival horror that's light on fright. More likely to induce a boredom-related coma than scare you.



» BOMBER HEHHE!

■ DEVELOPER: **FUJICOM**
■ YEAR: **2002**

■ *Bomber Hehhe!* gives you the unique opportunity to plan and orchestrate the demolition of high rise buildings, and it's down to you to execute the felling of various structures to the specification of the mission. Some buildings are in residential areas, others in built up downtown locations, and you need to carefully place charges in order to bring them down successfully. Engineering pundit Fred Dibnah would have loved this oddity.



» I-SPY: OPERATION ESPIONAGE

■ DEVELOPER: **NEC**
■ YEAR: **2000**

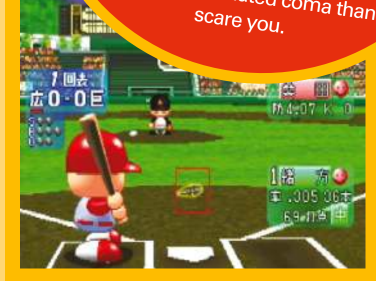
■ If you've ever fancied yourself as a budding Danny Ocean or Charlie Townsend, *I-Spy* could be the game for you. A tactical heist/spy simulator, you control four different agents at once and can switch between them on the fly making them work together to overcome sometimes insurmountable odds. The visuals are a little bland, but *I-Spy* will test even the most tactical of minds.



» SEVENTH CROSS

■ DEVELOPER: **INTERCHANNEL**
■ YEAR: **1998**

■ If you've ever wanted to play god and develop your own unique creatures, right down to the very fabric of their DNA, then *Seventh Cross* is a game you should take a look at. An almost infinite number of chimeras can be created and you must guide them from slopping about in primordial swamps, to embracing the bipedal intelligence we see today. A true survival of the fittest, even Darwin would have a blast playing through this.



» JIKKYOU POWERFUL PRO YAKYUU

■ DEVELOPER: **KONAMI**
■ YEAR: **2000**

■ Konami's output on the Dreamcast was sporadic, and the quality of the games varied. One title that deserves its place at the upper end of the scale is *Jikkyou Powerful Pro Yakyuu: Dreamcast Edition* – an baseball game featuring super-deformed characters and some really nice visuals. Great play-by play commentary and stadium atmosphere, complemented by easy-to-pick-up gameplay make it a winner.



EDITOR'S CHOICE Final Fantasy XI

In the same year that Sony redesigned the look of its world-conquering console, Square was also creating a new stylistic approach for its highly successful RPG franchise. It dropped the sci-fi influences that were so prevalent in its first two PlayStation *Final Fantasy* games and adopted the fantasy setting and stylistic look of its earlier games. It was a wise move and the game went on to sell over 5 million copies.

PSone

» MANUFACTURER: Sony **» YEAR:** 2000 **» COST:** £80 (launch) £30 (today, unboxed)

If there's one thing that's prevalent in the world of consoles it's the concept of the redesign. Atari revisited the aging Atari 2600 in 1986, nearly a decade after its original release, while Sega and Nintendo made various updates to their own consoles over the years. Perhaps one of the most successful updates of a console though was the introduction of the PSone in 2000. Later redesigns for both the Game Boy Advance and Nintendo DS would also go on to strike a chord with consumers, but there were few consoles at the time of the PSone's release that revitalised the core brand in the same way.

Incredibly neat in its design, it was significantly smaller than the original PlayStation and it still looks absolutely gorgeous today. The moulded curved corners make it look exceptionally stylish and its well crafted, too. There are concessions of course (the parallel and serial ports are missing) but it's a fair trade off and the end result is a beautiful looking machine that has access to one of the most diverse range of games on any home console. Little wonder it outsold every other games system on its first year of release, including Sony's brand spanking new PlayStation 2. *



PS one fact

■ If you want the ultimate in cool we'd suggest tracking down the PSone's neat LCD screen attachment. Just be aware that it's region locked.

PROCESSOR: MIPS R3000A-COMPATIBLE 32-BIT CPU (33.8688 MHZ)
RAM: 2MB MAIN, 1MB VIDEO, 512KB AUDIO
GRAPHICS: GEOMETRY TRANSFORMATION ENGINE (180,000 TEXTURED POLYGONS PER SECOND)
OPERATING SYSTEM: 512KB PLAYSTATION BIOS ROM
AUDIO: 16-BIT SONY SPU (24 CHANNEL ADPCM/MIDI)
MEDIA: CD-ROM (650MB CAPACITY, 2X SPEED)



> Every purchase was like a memorable occasion, as much for the fact that you knew nothing about it
>
> Gregg Mayles



GREGG MAYLES

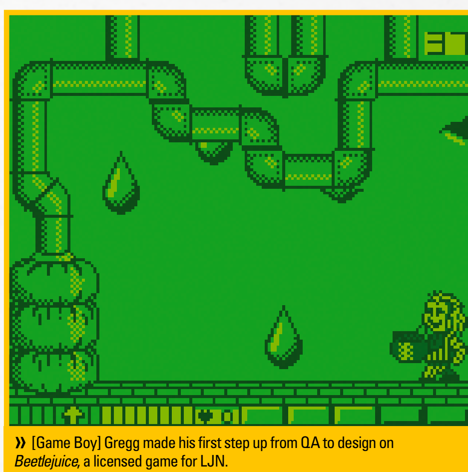
With decades of experience and a string of hits behind him, Rare veteran Gregg Mayles is one of the UK's premier game designers. Nick Thorpe sits down to chat about his career so far and what the future holds...

Gregg Mayles doesn't seek the limelight, so he might not be the first name that springs to mind when you think of Britain's top game designers. However, his track record speaks for itself. Working on multimillion-selling hits such as *Donkey Kong Country* and *Banjo-Kazooie*, he has a number of platform-defining games that span the console generations under his belt, all while remaining at the local company that hired him straight out of school. His latest project is *Sea Of Thieves*, an online pirate-themed action adventure for the Xbox One which represents Rare's first voyage into the world of multiplayer-focused online games.

How did you first become interested in games?
The first machine I remember playing was a home console called – I think it was called a Radofin, I think they were a British electronics company, and basically they looked at the Atari [2600] and thought, 'Oh, we'll copy that,' and made their own version of it. I remember my parents buying me one of those, I think it was for Christmas and it was completely by surprise. I hadn't asked for one, they just bought one. So I played that a lot, there was a *Pong* clone and kind of a clone of that tank game that Atari had at the time. But apart from that, I was kind of aware of the first generation of arcade machines like *Space Invaders*, *Pac-Man* and *Galaxians*, so I played those games whenever I got a chance – in those days you found the machines here, there and everywhere, sometimes in arcades, sometimes in shops.

I don't think I'm what you'd call an avid player that really grasped videogames straight away, I did have other interests, but when games were introduced to me I thought, 'Oh yeah, that's quite interesting,' as well.

So did you have much experience with Ultimate's games back in the Eighties?
Yeah, I think I owned every single one. I don't need to tell you this, but the level of mystique around them was immense, and they were based in Ashby-de-la-Zouch just down the road, I'm sure you know. Even though I'm local, I was actually born in Ashby, they might as well have been based on the moon for how accessible they were. But yeah, I was really aware of them. In those days, shops that sold games didn't really know much about games – it was Boots, Dixons and places like that. For me, I got all my information from a guy at Derby Market, an indoor market – I haven't been for years but it's probably still there – but there was this guy that seemed to know everything about when every game was going to be released, and he knew when the next Ultimate game was due in. So I'd save up my pocket money and badger my parents to take me to Derby on the day the next game was released.



» [Game Boy] Gregg made his first step up from QA to design on *Beetlejuice*, a licensed game for LJN.

Effectively you were handing over – their games were twice as much as everyone else's games at the time – for a game you knew absolutely nothing about, beyond some really nice artwork done by Tim [Stamper] and a really cryptic description that didn't give you any idea of what the game was about. Every purchase was like a memorable occasion, as much for the fact that you knew absolutely nothing about it and we had to go out of our way to get it as it was for the games themselves.



How did you come to work for Rare?
Completely by chance! I had no grand plan for when I left school – I went to sixth form and decided I didn't want to go to university, I'd had enough of school, so I had no idea of what I wanted to do. Schools' career advice in those days wasn't exactly that diverse, so I kind of… I don't really know what I wanted to do, I just started taking the safe option, I started applying for jobs in chartered surveying and banks. I actually got offered a job in one of the banks, I can't remember which one it is now. I remember going for the interview, getting the job offer, and then my parents spotted this little advert in a local paper – a tiny little box, saying basically, 'Rare – games testers wanted'. So I thought, 'Well, they're just down the road from me – I'll at least apply,' thinking it could be a bit of fun – all my friends had gone to university or were having some time off before going to university, so I thought I could treat that as my 'fun time' before I had to get a proper job. So I came into Rare and kind of had a chat with them, and they offered me the job. I went back home and pretty much everyone told me to take the job in banking because it was a safe thing, but at the time I was 18 and I wanted a bit of fun so I took the job as a tester. That's it, really – purely coincidental, no plan where I'd always wanted to do it since I was a kid – none of that story at all.

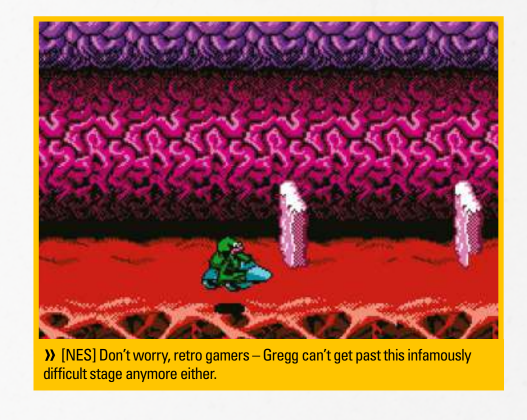
So what was the first game that you worked on?
It was *Beetlejuice* on the Game Boy. Rare made a lot of licensed games in those days, and typically there'd be an agreed completion date, and that would be written into the contract between Rare and whoever the licensee was. I'm trying to think, was *Beetlejuice* LJN Toys? Maybe? So it was basically lots of different companies, and there was quite a lot of pressure on ensuring that the game was finished by the agreed date, because that's how licensed games worked in those days.

With *Beetlejuice*, we'd got a NES one and we'd got a Game Boy one. The NES one was going along fine but the Game Boy one was struggling a bit. During my time in testing I'd had a few chats with Tim about games in general, about what I liked, what I thought was bad, and I think to be honest they'd got to the point where they had to try and fix *Beetlejuice* by putting someone on it. They didn't have anybody else, everyone else was busy, so they basically came to me in testing and said, 'How do you fancy having a look at this game, do you think you can sort it out?' That was literally it – it was just, 'We've got this problem, can you help us?' And that was it, that was my first design role, I learnt on the job. Again, it was just being in the right place at the right time.

How big was Rare at this point, as a company?
When I joined I was employee 32, but all the previous ones – there wasn't still 31 people there. I'd say the company was about 30 people at that time. There were a few comings and goings, but it was quite small, you certainly knew everyone there on a first-name basis. The business was based in Twycross, just up the road. You probably passed the farmhouse as you came in, there was nowhere really to go so everyone had their lunch together, we did really feel like one family, the Stampers' mum and dad worked there as well so it had this real family atmosphere.

> "I was 18 and I wanted a bit of fun so I took the job as a [games] tester. That's it, really – purely coincidental"
> Gregg Mayles

Going back to working on game design, what was the first game you took from start to finish in a design role?
That'd be *Donkey Kong Country*.



» [NES] Don't worry, retro gamers – Gregg can't get past this infamously difficult stage anymore either.

Oh right, so that was a bit further down the line for you, then.
Right, so after I did *Beetlejuice* I worked on *Battletoads* on the NES, briefly towards the end, doing some level design, and then I jumped onto *Battletoads* coin-op, which had been on the go for a little while but again, was lacking some kind of design so I went from helping out on the end of NES *Battletoads* to doing quite a lot on *Battletoads* coin-op, and then after that *Donkey Kong Country*.

***Battletoads* is certainly fondly remembered, if as much for its difficulty as anything else!**
Oh yeah, we never intended it to be that difficult. We played games a lot, and the guy that coded it, Mark Betteridge was an amazing games player, he was really skilful. So it was a combination of us playing it a lot and his natural ability. We basically set the game at a level that gave us a decent challenge, but obviously we'd put hundreds and hundreds of hours into playing it. Then it came out and people were saying, 'This is really hard,' and we were like, "It didn't seem that hard to us!" And now, I played it on *Rare Replay* and I couldn't do it anymore, it just really kicked my arse – Turbo Tunnel, I couldn't get by.

So with *Donkey Kong Country*, that's a pretty big deal – Nintendo handing over the keys to one of its most beloved arcade games. But given that Rare was used to handling big licensed games, it might not have seemed quite as big to you as we're imagining?
No – I mean, I was still pretty young at the time, I'd been 22 maybe, so it just seemed like another opportunity. I'd just come off *Battletoads*, really enjoyed



» [SNES] *Donkey Kong Country* helped Nintendo trounce Sega in the 1994 Christmas period.



FIVE TO PLAY
Our picks from Gregg's gameography



BATTLETOADS
ARCADE

■ While the NES original is notorious, we tend to prefer this arcade outing, which was one of the surprise highlights of the Xbox One compilation *Rare Replay*. Big, colourful sprites and ridiculously over-the-top attacks are the order of the day in this beat-'em-up.



DONKEY KONG COUNTRY SNES

■ It was astonishing to look at back in 1994, but *Donkey Kong Country* is more than just a pretty face. With varied stages, lots of secrets to find and an accessible level of challenge, there's a reason this platform game remains an evergreen staple of many retro collections.



BANJO-KAZOOIE N64

■ Seeing *Super Mario 64* running made Gregg and the Dream team scrap their 2.5D platformer. What they came back with was a game that was built to outperform Nintendo's classic, featuring more visual detail, more moves, more rhyming dialogue and many more items to collect.



GRABBED BY THE GHOULIES XBOX

■ Sometimes, there's nothing better than walking into a room, beating up a bunch of bad dudes, and then leaving. If that appeals to you, *Grabbed By The Ghoulies* is a game you should track down. It's not a ride that'll last ages but you'll have a good time while you're on it.



VIVA PIÑATA XBOX 360

■ If you think the Xbox 360 generation was all about bald doughy space marines with big guns, we'd implore you to check out this cute and colourful simulation. Tend your garden, breed dozens of types of pinata, and fend off the evil Ruffians. A real early highlight for the system.

working on that, and then there was a chance to jump onto something different and get into working on the SNES. I was obviously aware of *Donkey Kong*, but I never liked the arcade game, to be honest – there was just something about it, it never really grabbed me like *Space Invaders* or *Galaxians* or something like that. I don't know what it was, but I never got into the game. So I was aware of the character and the game, but I remember it being almost matter of fact – I think I was sitting outside on my lunchtime, and Chris Stamper sat down on one of the benches outside next to me, and said, 'How would you like to design a game with Donkey Kong in it?' That was it, that was just the question. So I said, 'Yep, count me in,' and that was pretty much the end of the conversation at that point. It was a great opportunity for sure, but I don't think we realised how great an opportunity it was until a bit later on. I think we were just happy to have another game to work on at the time, to start with.

It's easy to forget that even as recently as the early Nineties, a lot of UK developers were still primarily targeting the home computer market. Do you think Rare's early entry into consoles gave the company a leg up when it came to making games like *Donkey Kong Country*?
Yeah, certainly the NES – that was the first Nintendo platform I was exposed to when I joined Rare, it kind of had a certain, almost exotic feel to it. Even though when you looked at the home computers at the time, 16-bit stuff like the ST and the Amiga, they clearly outperformed the NES, I think some of the Japanese designers, some of the ideas they were putting on the machine, they were just eye-opening – just the sheer creativity of it, games that were never released over here, Japanese-only games that we'd be playing – no idea what they meant, but they were just fascinating. It kind of did feel like another world I'd been exposed to. The home computers were kind of – not limited, but the kind of games were reasonably similar, whereas on the NES the broad spectrum of games seemed to be so much wider. So at that point I almost forgot about the home computers and I just wanted to play the Nintendo games, and that carried on to the SNES. By the time we came to do *Donkey Kong Country*, we'd almost had a few years of thinking like 'Nintendo-think'.

That allowed us to take the graphics technology that we'd been experimenting with for quite a while before *Donkey Kong* – it wasn't invented for *Donkey Kong*, it was just something the Stampers had been messing around with, I think they created this boxing demo – and Nintendo saw the technology we were working on and basically put two and two together. I think at the time the Mega Drive was trouncing them in terms of visuals, there were some really nice-looking Mega Drive games at the time, and I think Nintendo's games – although they were really well designed – visually, they were a step behind. So they'd seen we'd got this graphics technology and basically came to us and said, 'Can you create us a game using *Donkey Kong* that looks better than *Aladdin*?' So we said, 'Yeah, we'll give that a go.'

So, again, it was another series of coincidences – they saw our technology, they felt they were losing out to Sega and had *Donkey Kong* as a dormant IP. And all credit to them, they basically allowed us free reign with *Donkey Kong* which, if I was in their shoes, I'm not sure how I'd feel about that – giving something so precious to a foreign company you know very little about. So they were incredibly trusting and supportive.

» [Arcade] *Battletoads* was Rare's most recognisable franchise of the early Nineties, and Gregg was heavily involved in the arcade game.



» Banjo here, hanging out in one of Rare's meeting rooms.

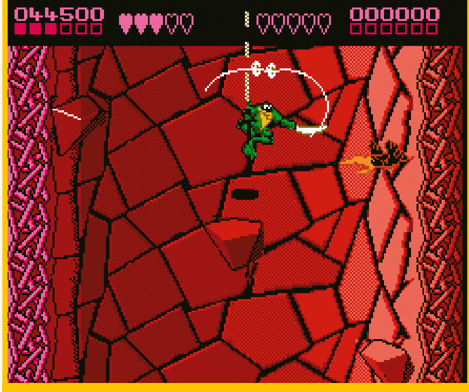


» [N64] It's amazing to think *Banjo-Kazooie* came from an RPG project starring a young boy.





We were greeted by this hulking toad at the top of a flight of stairs.



[NES] *Battletoads* on NES was a big success for Gregg and Rare and several games followed, including a cool arcade game.

That's interesting – we've heard of situations at other companies where the approval processes for characters are so strict that even different branches of the same company actively shy away from using those characters, so that's quite a high degree of freedom.

Oh, if they thought we were doing something that was against what the character should be, they'd certainly tell us. One of the first things that we decided that we wanted was for *Donkey Kong* to have a sidekick – it was basically an extra life, but we wanted a different way of having the extra life that felt a bit more. The world we created for *Donkey Kong*, we tried to make it feel as real as we could, as real as a game could be in those days. Part of that was that I didn't want the character just to have an abstract second hit, so it made complete sense to have a sidekick, so when one got hit the other guy took over.

So we looked at Donkey Kong Jr, the little character with the nappy on, and thought that's not going to fit the game, so we went around basically re-imagining Donkey Kong Jr, and that was Diddy. We gave him a baseball cap because that was the height of fashion back then! We showed it to Nintendo and said, 'This is what we want to do with Donkey Kong Jr,' and I think to them it was a step too far. They said "that can't be Donkey Kong Jr, but we're happy for it to be a new character,' so we dropped the name and eventually ended up with Diddy. Diddy was the third choice, we failed twice to get the name we wanted – I think we wanted… Dinky was the first one we went after, but obviously the toy manufacturer wasn't too chuffed about it, and I'm sure there was one other one we tried. To everybody else it just seemed like a funny name, but obviously it's British slang for small, so to us it was amusing. That's a thing with Rare games, we tend to put British slang into them which obviously British players get straight away but even the Americans catch on eventually.

Have you ever had any pushback against including British humour in games?

Oh yeah, loads. Not in terms of it being negative that



[N64] Gregg and the Rare team had fun with ratings board by trying to push the boundary of what it meant to be 'E-rated'.

we put it in, it's more a case of certainly with E-rated games, trying to push it a bit too far and we get stuff back saying, 'You can't say this in an E-rated game,' or we try to sneak things in using British slang – not completely offensive stuff, but something I'll have a bit of fun with and occasionally overstep the line, and that's why the ratings board is there. But sometimes it's quite funny – it used to be faxes, it's all emails now, but you'd get a fax from whoever it was saying, 'You can't say this,' and the formal process was that they'd have to tell you why you couldn't have that word in the game, even though they knew what it was, we knew what it was, they'd have to actually put it on a piece of paper. Just reading it on a piece of paper made it so funny.

So *Donkey Kong Country* was a huge success, did you ever expect – what was it, nine million copies were sold?

Yeah, we never expected that amount of success. I think I'd be lying if I said we didn't expect it to be successful. Certainly towards the end, we'd been to CES and we'd seen the announce and it was playable on the show floor, so it was just a matter of getting it finished after that. So we had an inkling it was going to do okay based on the reception it had so far. I think the estimate was about half that, maybe four million or something, and even then we thought, 'That'd be awesome if we sold that many,' and then it came out and it went absolutely crazy. I think we knew we'd do okay in America because all our shows had been in America, but what did surprise us is how well it did in Japan. I think it sold nearly as many copies in Japan as it did in the States, which is very unusual, certainly for a western-developed game. It was typically a very closed thing at the time, Japanese gamers bought Japanese games. I think being as we'd worked so



[SNES] The sequel to *Donkey Kong Country* was harder and more refined than its predecessor.



[SNES] *Donkey Kong Country* features Cranky Kong, the original star of Nintendo's arcade hit, *Donkey Kong*.

> It was a closed thing at the time, Japanese gamers bought Japanese games
> Gregg Mayles

closely with Nintendo, and obviously we'd learnt from playing Nintendo games and we were working directly with some of the best people at Nintendo, that rubbed off on the game itself so I don't think they saw it as a typical western game. We were all still quite young – I think if I had that amount of success now I'd appreciate it a lot more, when you're that age it feels like it'll be that way forever, and that's never the case.

***Donkey Kong Country* continued on for the next couple of years via its sequels – how much do you feel they carried the SNES through its later life?**

Quite a lot, I think. When we first showed *Donkey Kong* at the press event, I was in the audience and everyone was really kind of taken aback by it, and I think everyone was expecting it to be one of the first games for the new hardware – at that time the Ultra 64 – so I think everyone was expecting to see the logo for the new machine come up when the footage finished, and when it said, 'This is for the SNES,' that floored people – they didn't expect it. I think they'd almost written the SNES off and were keenly looking forward to the new games, so I think the fact that *Donkey Kong* came that late gave us an opportunity – almost everyone else had moved on and was thinking ahead, so there wasn't too many games at the same time, so it gave us this window of opportunity late in the SNES' life that obviously we did pretty well on.

Speaking of SNES projects, am I right in thinking that *Project Dream* started off on the SNES?

It did indeed. After we did *Donkey Kong Country 2*, I'd basically had enough – although we did a third one because we knew it was going to be successful, I think I got to the point where I wanted to do something new. The people working on it from the start didn't feel we could give it the same amount of attention and we wanted to do something new. So we took the graphics technology that we had for *Donkey Kong* and thought about what other genre we could apply to it, and we decided to do more of an RPG, adventure game with it. We probably dabbled with it for a couple of months, but it was clearly so late on in the Super Nintendo's life that even though we were doing a *Donkey Kong Country 3*, that was going to be out in a year or less, there was no way that this new game that we were calling *Dream* was going to be finished before the machine was obsolete. So we dropped it pretty much straight away on the Super Nintendo and started looking at taking that idea and putting it on the Nintendo 64.

And then it underwent a huge evolution into *Banjo-Kazooie*, to the point that it's almost unrecognisable from the original design.

Yeah, just a bit! It was barely even the same game to be honest, it started off as an RPG adventure – for about a year we were trying to find out what the identity of this adventure was, we were messing around with technology, and how to construct the levels. We'd got some height map technology where it was basically like a gridded floor and you could raise points up, and we were trying to create these landscapes – then we kind of fabricated a story, it was

ULTIMATE'S ULTIMATE

Gregg explains the design mastery behind Sabre Wulf



» [ZX Spectrum] Gregg points out *Sabre Wulf*'s jungle design as one of his favourite elements.

We were curious to know which of Ultimate's games Gregg liked the most. "Out of all of them, *Sabre Wulf*'s always been my favourite," he explains. "A lot of people plump for the 3D stuff, but it never really grabbed me – I always felt it was a little bit too fiddly for me. I admired the technical achievement but *Sabre Wulf* was an arcade-style game, and I just loved the jungle setting and the fact that this wolf was chasing you around the jungle."

It's no great surprise, given that the game still holds up well – Darran spent a couple of weeks playing through the game when *Rare Replay* was released in 2015. Interestingly, it was that compilation that led Gregg to a deeper understanding of the game's design. "I think at the time someone showed me the map of the jungle, and I was stunned at how small it was. When I was a kid playing those games, I just imagined it to be absolutely colossal – it was really easy to get lost and you kept wondering where to go. And then someone showed me the printout of the map, and it's actually a bit disappointing seeing how small it was, but it was just so cleverly put together."

So how is the illusion of size achieved? "I think it's the sameyness of the graphics, actually, that do it," Gregg explains. "It's a positive thing, in that a lot of the locations kind of look familiar, so you feel like 'have I been here before? I'm not quite sure.' So I think it actually worked quite well, but then you had these occasional flashes of the mountains at the bottom or the top, where you got the reference. And then they introduced new baddies as well, so the further you got you started to see that rodent-type thing, and even though the little rodent wasn't that special, the fact that you had to be that far to see it. In many ways, the forethought – 'Oh, the player's got this far, let's show them a new thing, now they're this far, let's show them a new thing' – has stuck with me until today."





» [N64] The original *Banjo-Kazooie* was a huge success for Rare. It was followed by several sequels.


» [N64] Rare pushed the N64 like few other developers, with detailed visuals and rich game worlds.


» Conker tried to interrupt our interview with a storm of f-bombs.

actually around a bunch of pirates who were up to no good, led by Captain Blackeye. We kind of crafted this story around it, but I think ultimately, the technology never got to a point which allowed us to build the game – we lacked that focus of 'this is what the technology is' or 'this is what the game is' – both the technology and the concept were a bit too up in the air, and a combination of both meant that even after a year, we hadn't really got to where we wanted to be with it. And we just kind of looked at it and thought, 'With this technology and the way we're going at it, this thing's never going to be finished.' So we dropped it and kind of started looking at something simpler for the technology to achieve, so we took a little bit of a step back and had a look at what we did with *Donkey Kong* and thought, 'Oh, couldn't we take this technology and some of the thinking behind it and create a pseudo-3D platformer?' And it was that for a couple of months – looking back, we call it *Banjo 2.5D* – so it was basically a side-scrolling thing but we had depth so you could run into the screen.

So a bit like *Bug!,* on the Saturn?

Yeah, a bit like that, but before any game really did that. We messed around with that for a while, probably another couple of months, and then we played a demo of what was to become *Mario 64* and it was kind of like a 'Eureka!' moment – *this* is how 3D games are going to be in the future, this half, pseudo-3D approach we'd taken was going to be out of date before we'd even finished it. So we took the character we'd got, which was Banjo – he was in the adventure game and his backpack was designed for carrying objects, as we were going for the realism again and lots of games had invisible inventories. So we had the character, and it was a case of working out how to bring him from the adventure game to the 2.5D platform games to the 3D platform game. So it was a pretty convoluted route – and there was no Kazooie as well, she got added because I wanted a double jump without the weirdness of jumping in midair. I wanted a reason mechanically for him to able to double jump. So we thought maybe something could appear out of the backpack – originally it was a pair of wings, no bird or anything like that. Once we needed new moves, we put two and two together and decided to make it a new character. From there everything pretty much fell into place.

After doing *Banjo-Tooie,* Rare was bought by Microsoft and you did *Grabbed By The Ghoulies* for the Xbox – a game that didn't get a great reception when it was released at the time. However, we feel that it was a bit better appreciated when it appeared in *Rare Replay.* How do you feel about it, looking back?

Grabbed By The Ghoulies was probably one of the most enjoyable games I ever worked on. By no means the best game I've worked on, but I think at the time, the team had such a good time making it, and I think we were under the radar for a long time, even though the people that were working on it had worked on *Banjo* and *Donkey Kong* before that. It was originally a GameCube game, and it was kind of meant to be a bit of throwaway fun so it wasn't super in-depth, but it had all the charm we'd put in other games, and then when we found out we had to transfer it to the Xbox, it just – I don't think it fitted particularly well on the platform at the time. Amongst all the other GameCube games I think it'd have fitted in really well and we'd have had the same audience we normally had, but then we went to this other audience that was more used to playing probably more serious games that looked very different. It was kind of too late to do anything about


» [N64] *Banjo-Tooie* was a more than competant sequel, but some were concerned by the sheer amount of stuff to collect in it.



» [Xbox 360] Gregg's desire to challenge new genres occasionally leads to curveballs like *Banjo-Kazooie: Nuts & Bolts*.

it. I think if we'd had more time I would have aged it up – not made it mature in any way but probably aimed for a Teen ESRB rating rather than an E rating, and just make it a bit more edgy. Probably add a bit more depth to it as well, as it is a very simple game. But it was still a really fun game to play, and some people did really enjoy it on *Rare Replay*.

It was nice to see that it got a bit of love in terms of a full HD port, too.
Oh yeah, the backgrounds in particular have really stood the test of time. When we were thinking about what to do – because at that point Rare had got quite a name for itself with its visual look – I think the criteria we set the artists were, 'I don't want to see a straight line,' so basically everything you see in the game is crooked. I think that's what gives the game its charm, which allowed it to translate so well to HD. It's got that cartoony, crooked charm to it. There's a lot of *Scooby Doo* in there, I was a massive *Scooby Doo* fan – like how the mummies walk around with their arms outstretched, just like a typical baddie in *Scooby Doo*.

Around this time, towards the Xbox 360 launch, you were at management level – is that right?
Sort of, I dabbled with it for a while but it just wasn't for me. The further I got away from games, the more unhappy I became. I did spend a bit of time in a more overseeing role, but not particularly hands-on in any game, and it just didn't suit what I felt I was good at. So it didn't last very long in that purely managerial role – I tried to find that happy medium between being the guy that did every single bit of gameplay in the game. I didn't want to do that anymore, and I didn't have time to do that anymore, but I didn't want to be a manager that didn't have any hands-on at all.

» [Xbox] Even the washing machines here are crooked, reinforcing the *Grabbed By The Ghoulies* aesthetic.

So it's important for you to stay in touch with the design aspect of creating games, then?
Completely, that's the one thing that hasn't changed. I don't have a clue how the editors and setup tools work these days, but I'll still spend a lot of time playing the game and look at the mechanics, and the emotions that we're trying to put in players' heads. That's the basic entertainment of a game – how do you make players feel? That is as important to me now as it has ever been.

The first of the Xbox 360 projects that you designed for was *Viva Piñata*, and that's another interesting one – it's certainly not a typical Xbox property when you think about it next to games like *Halo*, *Gears Of War* and *Forza Motorsport*. How did it do overall?
For that platform it was on and the audience it was released to, I think it did really well. I think it sold just over a million copies, which we were really pleased with given the fact that it stood out like a sore thumb in the Microsoft portfolio. But that's what Microsoft wanted – they basically said, 'Make us some Rare games,' so we were doing exactly what we felt we should be doing, and what Microsoft wanted us to do. It's got all the hallmarks of a Rare game – it's got that distinct graphical style, it's fun, it's charming, it's got the attention to detail, it's something a bit different. I think by that point the old *Banjo* team had started to fragment and we were building a new team – some of the *Banjo* team were still around but we added a load of new people as well. The team had to get a lot bigger, because of the graphical capabilities. No longer could you be a team of 14-15 people, so we had to bring a lot of people on. I think we maintained the same ethos of how the team thought, the charm and the humour. I really enjoyed working on *Pinata*, and there was the cartoon series as well – Microsoft went

SELECTED TIMELINE

GAMES

- **BEETLEJUICE** [1991] GAME BOY
- **BATTLETOADS** [1991] NES
- **BATTLETOADS** [1994] ARCADE
- **DONKEY KONG COUNTRY** [1994] SNES
- **DONKEY KONG COUNTRY 2: DIDDY KONG'S QUEST** [1995] SNES
- **BANJO-KAZOOIE** [1998] N64
- **BANJO-TOOIE** [2000] N64
- **GRABBED BY THE GHOULIES** [2003] XBOX
- **VIVA PIÑATA** [2006] XBOX 360
- **BANJO-KAZOOIE: NUTS & BOLTS** [2008] XBOX 360
- **KINECT SPORTS** [2010] XBOX 360
- **KINECT SPORTS: SEASON TWO** [2011] XBOX 360
- **KINECT SPORTS: RIVALS** [2014] XBOX ONE
- **SEA OF THIEVES** [2018] XBOX ONE

> "The further I got away from games, the more unhappy I became"
> Gregg Mayles



» [Xbox 360] *Viva Pinata* wasn't your typical Xbox 360 game, but it found over a million appreciative buyers.



A NEW VOYAGE What makes Sea Of Thieves a compelling multiplayer experience

***Sea Of Thieves* is a bit more of a traditional game, after working on Kinect projects for a few years. How does it feel to return to this type of game?**

I don't think we'd ever call it a 'traditional' game. For Rare, it's a different game. It's our first online game, it's very multiplayer-focused – it's our first MMO, if you want to call it that, it's got a lot of MMO things about it even though it's not really an MMO. There are a lot of different things about it, so we never really thought of it as 'going back to a traditional game' – just, 'What do we want to do next?' It came about from looking at what we called 'shared-world games'. *EVE* had been going for a while, *DayZ* was big, *Minecraft* – games which gave players a lot of freedom. We thought that could be a interesting genre for us to have a go at.

We had also been playing a lot of board games at work at that time, and we found that as in real life, if you get a small social group of people together and give them something to do, you almost create your own entertainment. The games had simple rules, but the social interaction between a bunch of people, certainly those that knew each other, you could have some good times. There doesn't have to be much of an agenda, but get people together and there's something in it. So we wanted to make a game around that kind of thinking, getting a group of players together, and a small group was really important – if a group grows beyond a certain size, it loses some of its intimacy. If a group gets too big, you get people on the fringes that don't feel that they're part of it, so I wanted the group the played to be small, so that everybody felt that they had a say and everyone felt important.

That's how the game started, it wasn't even pirates at that point – it was just important that we had that group from the start. We had to come up with the idea of what the theme was going to be, and we had a bunch of suggestions stuck up on a wall. I think we got it down to seven, and then pirates almost chose itself because it's a natural fit for what we wanted the game to be – a small group of players on a ship, and the ship is the thing that acts as a way to keep the players together. It's also the thing you care about – when the ship sinks, you feel that collective responsibility. After that, a lot of the things we put in the game almost designed themselves. Everybody knows what pirates do – they go after treasure chests, carry telescopes and drink grog.

» [Xbox One] *Sea Of Thieves* will let you take a pirate into the open high seas.

We've noticed hints that you can betray people – how does that tie in with the group play?

It's a pirate game, so to a certain extent, players quite rightly come in expecting certain behaviours. It's just been trying to find the right line – it's been incredibly difficult. Originally, we went into it wanting the stories players have coming out of the game to be as varied as possible. We liked the idea that pirates mutiny, and they do the dirty on their own crew, so to start with, within your own crew pretty much anything was possible. If someone fell overboard, it was up to the crew to turn around and rescue the player – there was no concept of the mermaid that rescues you. You could injure your own crew as well, and treasure was personal, so you could steal each other's treasure and cash in both yours and your mates'. We had all these mechanics in, we had pickpocketing in – we had all these mechanics in so you could go below deck to sleep and get your health back, but you could be pickpocketed while you were asleep. By the time it had happened to you ten times, no one wanted to go to sleep anymore.

What ended up happening is that players would wait until you got the wheel, come up and shoot you in the back of the head and then take all the treasure. Every single voyage ended up the same way. Everyone would cooperate and it'd be a great game up until the point you got treasure, and then it just absolutely disintegrated. At the time, it was such a tough decision to make to take all of that stuff out – we even had a whispering mechanic so you could whisper to your teammate and try to do the dirty on your other teammates. Ultimately, it lessened the stories that came out of the game and made it a very toxic game to play, so we took all of it out and said, 'We have to protect the crew from each other,' to try to foster that bond between the players. There's still ways you can grief your crew, like throwing the treasure

> “I think the absolute worst thing for me would be to be stuck on one thing constantly”
> Gregg Mayles



[Xbox One] Being an online-focused game, *Sea Of Thieves* is a voyage into uncharted waters for Gregg and Rare.

overboard, but that's what the brig's there for now, so crews can punish rogue crew members. We always wanted it to be a game that strangers could come in and play together.

If *Sea Of Thieves* does well, is there any scope for expanding the game later?
Oh yeah – we've built it to be a 'game as a service,' that shitty term that everyone uses these days. When we launch, that's just the start of what we want to do. Obviously, how well it's received and how long players play for, they'll ultimately be the test of how long it's around for, but we've certainly got many ideas of what to do – directions we want to take it in and things we could add. We've no plans to drop it once it's out and move on to something else.

Some ideas, we've already played them. We built a very extensive prototype at the start of development because we thought the best way to prove out what this quite odd-sounding game is, is to build it. So we built a prototype in Unity with a handful of people – really roughly designed graphics, all the graphics were built by designers and a handful of coders. Rather than create this massive presentation to tell people what the game was, we'd show them. Even when we first told Microsoft what we were up to, we were like, 'Here's a presentation, but also come and play the game.' That's always gone down the best – just let people play our ideas. So post-launch we'll be looking at how players are playing, what they want to see more of, what cool ideas we've got and it'll be a mix of all of them.

all-in on it, they wanted it to be a big thing so they signed a deal with 4Kids to make a cartoon. We kind of helped develop the cartoon with them, so that was a really cool experience.

You also worked on the *Kinect Sports* games during the peak of the Kinect phenomenon – how was the experience of working with non-traditional inputs?
A bit of a mixed blessing, as most things tend to be! On one hand, it was just something completely new so as a design and technical challenge, it was awesome. The tech guys loved it, us designers liked it, trying to come up with ways of using the human body as a controller. But as always, our ideas are usually one step ahead of what the hardware's capable of, and it was quite challenging to get it to do what you wanted. A controller is a very binary device – you press a button, and everyone presses a button and everyone gets the same result. When you're asking players to throw an imaginary ball, everyone's got their own way of throwing. It could be underhand, it could be overhand, you could throw it from the side – but everyone expects to be right, and everyone expects their way of throwing to work, and if it doesn't they won't blame themselves, they'll blame the game. We spent a lot of time figuring out and trying to make all of those player assumptions possible, trying to detect what the player was trying to do and making sure they got the right result. So even though we had all these great ideas of what we wanted to do, actually getting them to do what we wanted was really challenging and quite frustrating. I think by the time we stopped working on it we'd gotten as far as we could with it, but in those early days I really enjoyed it.

You've had a successful career in games, is there anything that you've always wanted to do that you haven't managed to get around to yet?
Err… no? I think 'no' would be the simple answer to that! I've never been the type of designer that looks too far ahead. I haven't got this grand scheme, where I want to make this game and I want to make that game – I just can't think that far ahead. You might get to that point and that kind of game is then completely irrelevant, or somebody else has done it. I've always tended to work in a way that I finish one game, I've put as much into it as possible, and then when I'm looking for something to do it's like, 'Okay, what games are people playing now? What could be popular in



[Xbox 360] The *Kinect Sports* series was popular, but working with the motion controller wasn't easy for the development team.

the future?' Occasionally, I'll get ideas that I file away for the future, but I wouldn't say I've got this burning desire where I think, 'Oh, I've never made a shooting game, I really want to make a shooting game.' If there was an opportunity to make one I think I could certainly take that job and do something interesting with it, and apply a bit of Rare thinking, but if the opportunity arises I'd love to have a go at any genre, basically. I don't spend a lot of time thinking about it. Not a very good answer for you, I'm sure! But having seen my time at Rare, you're never quite sure what will be happening from one day to the next, so I just learnt to go with that. I actually quite like the fact that I don't really know where I'm going next. Four years ago, if you'd said to me, 'You're going to be doing a multiplayer pirate game,' I wouldn't have believed you. I think that's what keeps it entertaining.

The fact that you just don't know?
Yeah. I think the absolute worst thing for me would be to be stuck on one thing constantly, or one type of game. And some people are fine with that, they see it as perfecting their art, refining something to be the best in that genre, but that's never been my goal at all. I like trying new things, and I like being put out of my comfort zone. As soon as I get too comfortable with a certain type of game, even if it's been successful, I always get itchy feet. Once it gets to the point where you're just making some campaigns to keep people playing, I'll be saying, 'I know how to answer that question, give me something I don't know how to answer, give me a game I haven't made yet.' Because humans get lazy. Everyone gets lazy. You just get stuck in your ways, and occasionally you just need something to jolt you out of that and make you do something completely different. *



Rare proudly displays its heritage in its offices.



[Xbox One] Gregg's only Xbox One project prior to *Sea Of Thieves* was *Kinect Sports: Rivals*.



Jurassic Park

A GAME WITH REAL BITE

» SNES » OCEAN SOFTWARE » 1993

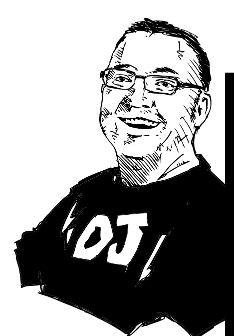
I love dinosaurs and was absolutely fascinated with them as a child. I even wanted to be a dinosaur hunter after a mischievous uncle told me that a number of different species were alive and well in the deepest jungles of Africa when I was five. The lie was soon exposed (I read a lot of books), but my love for dinosaurs never wavered and I'll put up with a lot of rubbish if dinosaurs are somehow connected to it.

Thankfully, one thing that wasn't rubbish was Ocean's treatment of Steven Spielberg's hit film for the Super Nintendo. I loved both the book and the movie and as the SNES was my current console of choice at the time I'd already resigned myself to the fact that I'd probably never get to play as a velociraptor (as you could on the Mega Drive version of the game). I picked up a copy as soon as it arrived at my local importer and took it home to play. I was not disappointed.

There are clearly issues with Ocean's game, mainly due to the cost-cutting decision to not include a backup save function of any kind, so you're expected to get through the entire game in a complete sitting, which certainly isn't easy. At the time I didn't really care, though, *Jurassic Park* did a great job at transporting you into the world that Michael Crichton has created three years previously. Visually, it was gorgeous with bright lush vegetation everywhere and a great array of dinosaurs, while the top-down viewpoint employed gave you a good oversight of your surroundings. Things became even better when you entered the many buildings of *Jurassic Park* and found yourself in a 3D environment reminiscent of other early first-person shooters. Sure, it was a little slow, but you got some effective scares when those raptors started racing towards you.

That lack of save data meant I never got around to completing *Jurassic Park*, but it hasn't stopped me from trying over the years. Now I've got access to a Retron 5 I might just give it another go.


10



» This month we take to the skies with the long-gestating Owlboy, find out how the new Secret Of Mana remake holds up and enter the Gate Of Doom



» [Switch] The stealth sections of *Owlboy* can be quite frustrating as it's not always clear what offers cover.

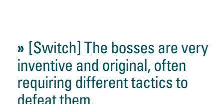
Owlboy

DOES IT RULE THE ROOST?

INFORMATION

» **FEATURED SYSTEM:** SWITCH
» **ALSO AVAILABLE ON:** VARIOUS
» **RELEASED:** OUT NOW
» **PRICE:** £18.99
» **PUBLISHER:** D-PAD STUDIO
» **DEVELOPER:** D-PAD STUDIO
» **PLAYERS:** 1

» [Switch] The bosses are very inventive and original, often requiring different tactics to defeat them.

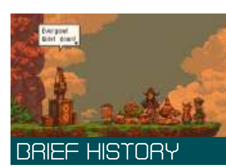


Few games are as beautiful to look at as D-Pad Studio's *Owlboy*. It appears to have been plucked from the 32-bit era of sprite design, where developers continued to push the limits of sprite-based technology while everyone else around them was fully embracing the 3D revolution, and it's all the better for it. *Owlboy* immediately catches your attention from its gorgeous-looking title screen and continues to awe you with its meticulously detailed visuals that look truly stunning in places. The floating islands that lead character Otus lives on are awash with rich warm colours, while the world itself pulses with life thanks to all the tiny details that have been crammed into each screen. Characters are full of personality, while cutscenes are brimming with fine detail and are full of atmosphere. It's a pity then that the mechanics of *Owlboy* fail to match its delightful looking visuals.

Owlboy is full of interesting game mechanics; it's just that many of them suffer from disappointing implementation. Take standard shooting, for example. Otus can carry companions who can use their weapons to take down enemies. The lock-on system isn't the best, though, and it's all too easy to not line shots up or accidentally lock on to the wrong target. Switching between characters (all of which have different abilities) can also be tricky at times, making *Owlboy* harder than it needs to be. This clumsiness only rears it head in certain situations, but it's annoying enough that it takes some of the charm away from D-Pad Studio's smart little game.

One of *Owlboy*'s biggest strengths is that it features plenty of variety with the developers adding all sorts of different game mechanics into the pot and some of them are extremely smart. One of our favourites comes early on when you're presented with





BRIEF HISTORY

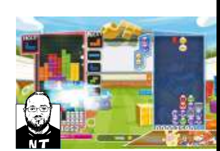
» Perhaps the most notable thing about *Owlboy* is its incredibly long incubation period. The game was originally conceived in 2007 and is heavily influenced by numerous classic NES games, including *Super Mario Bros 3* and *Kid Icarus*. It was originally released on PC in 2016 and will be heading to both Xbox One and PS4 at a later date.



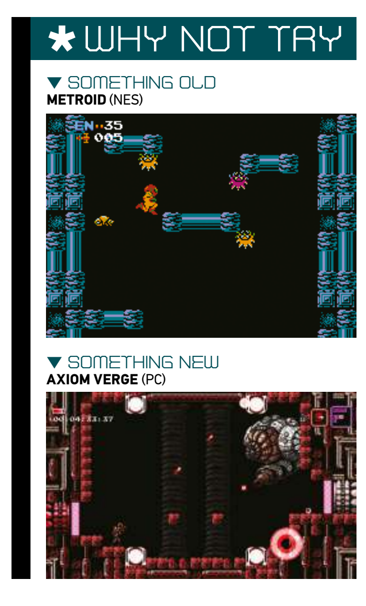
PICKS OF THE MONTH

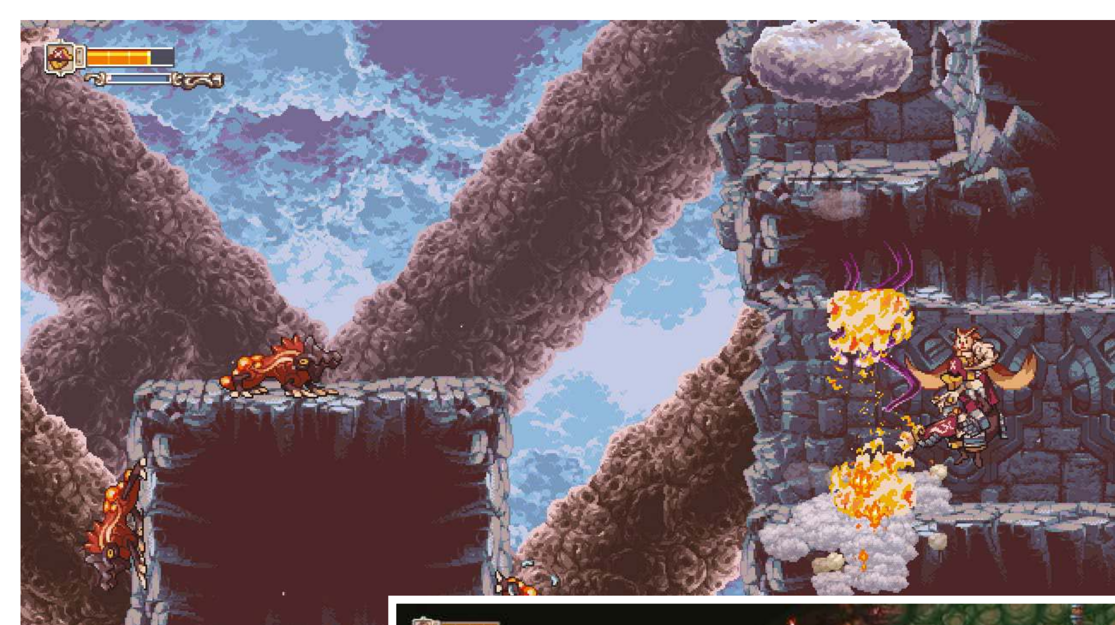


DARRAN
Owlboy
It certainly has its share of issues, but that hasn't stopped me from enjoying D-Pad Studio's very first Switch release.



NICK
Puyo Puyo Tetris
"I'm over my addiction," I said. "We're releasing it again, on PC this time," replied Sega. I'll check into rehab soon. Honest, guv.




» [Switch] The weapons of certain characters will allow you to reach brand-new areas of the world.

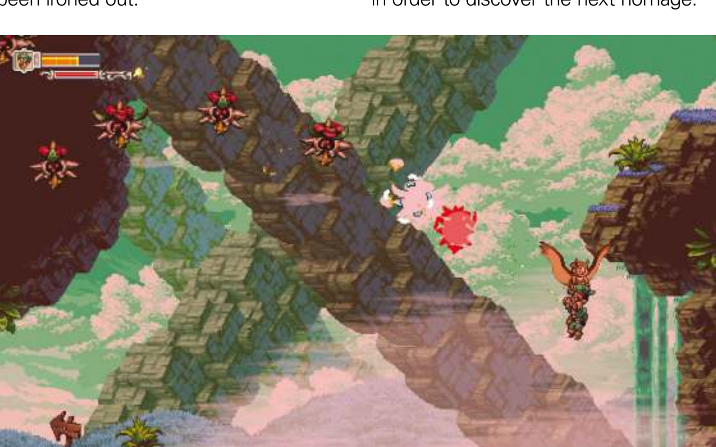
a cloud that creates water when you stand on it. Another features you sneaking past dangerous pirates who can kill you on contact, while yet another section takes place in near darkness with only a small light source to light your way (and keep ferocious flesh-eating insects away from you).

Owlboy is awash with clever little touches like the one we mentioned above, but the developer tends to rely on them too often and they fall the wrong side of frustrating or outlive their stay. The use of certain mechanics isn't always signposted, either, meaning you'll often be stumped over a puzzle because you have no idea what the game wants you to do. It means that you'll often get waylaid by annoying difficulty spikes that break up the flow of the game. We're sure *Owlboy* has had plenty of play testing during its development, but it still feels that there are a lot of little things that could have been ironed out.


» [Switch] *Owlboy*'s story gives great insight into many of the game's characters.

It's easy to forgive these niggles (and to be fair that's what many are) when there's so much charm and character to the game. Fruits can be plucked from trees and vegetables can be pulled from the ground and consumed (a lovely nod to *Super Mario Bros 2*) a group of Prinny-like creatures can be met, who give you an interesting insight into the game's cheery shopkeeper. There are lots of nods to various classic videogames throughout *Owlboy* and you'll want to push forward through Otus' adventure in order to discover the next homage.

» [Switch] This section requires you to light torches in order to find your way to safety.



The switchable characters we mentioned earlier are also a big part of *Owlboy*'s success and are one of the key mechanics of the game. Otus is relatively weak on his own (although he does pick up a few useful abilities like a fierce dash attack) meaning he has to rely on the various allies he picks up on his adventure. They all have different weapons and fire-rates and their items are all useful for accessing new areas of the *Metroid*-like world, so you'll often have to switch between them in order to succeed in a certain task. Another non-gaming benefit of these characters is that they act as mouthpieces for the mute Otus, pepping up the game's cutscenes with their entertaining dialogue. Although it's worth noting that while Otus may be mute, his expressive animation allows you to know exactly how he's feeling at any given time.

Bosses are another highlight of *Owlboy* and while some of them can be a little difficult at times, they are all well executed and will often require a fair amount of thought in order to best them. One particular standout requires you to outrun a gigantic guardian, desperately jumping over items or shooting objects out of the way in order to keep your distance, while another requires you to fly close enough to it in order to target it with its own missiles. They're full of creativity and obviously look glorious, too.

Owlboy is a highly entertaining take on the Metroidvania genre, is fairly priced for the ten-hour-plus playtime it offers and has clearly been a labour of love for everyone involved. What a pity then that it feels so rough around all those beautiful-looking edges. ✱

In a nutshell

A sumptuous-looking Metroidvania adventure that's occasionally let down by clunky controls and annoying difficulty spikes.


>> Score **78%**

✱ PICK OF THE MONTH

Wulverblade

» System: PS4 (tested), Switch , Xbox One, PC **» Buy it from:** Online **» Buy it for:** £14.99

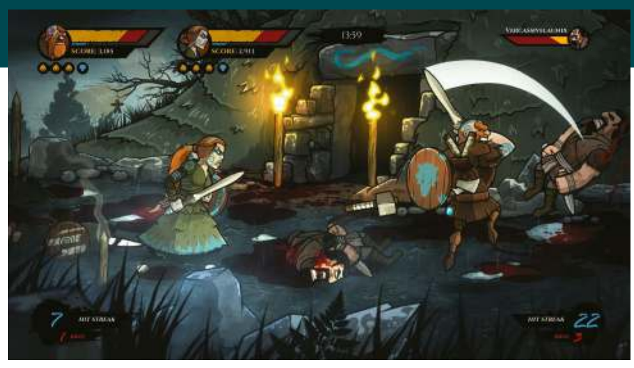
Well this is a pleasant surprise. While Fully Illustrated's scrolling fighter pays tribute to the likes of *Golden Axe*, *Final Fight* and other brawlers of the Eighties and Nineties, it's a love of British history which is really the source of *Wulverblade*'s bloody inspiration.

Set in 120 AD it tells the tale of Caradoc, and his two friends, Brennus and Guinevere as they join forces to defend the north from the occupation of the Roman army. Michael Heald, *Wulverblade*'s creator, is a history buff and you can witness it in every frame of the game's sickeningly beautiful animation. He spent a colossal amount of time researching the area where his game is set and has filled his brawler with a staggeringly amount of fascinating information about the period. You're rewarded with unlockable videos as you progress through the levels and you'll learn plenty about the people you slaughter and the weapons you eviscerate them with.

And let's be clear, *Wulverblade* is one bloody game. Heads can be stomped to mush, warriors can be dismembered or decapitated and then you can throw their limbs at anyone that's still left standing for good measure. Caradoc is an all-round fighter, excelling in all areas, while Brennus is *Wulverblade*'s tank, and Guinevere sacrifices power for agility. All three play significantly differently, and the combat engine that Fully Illustrated has created is full of depth and complexity. Running dashes, grapples, blocks, uppercuts and many more abilities are available and there's even an old-fashioned powered-up strike that's pulled off by pressing two buttons at the same time. Weapons are plentiful, too, with some allowing you to execute devastating attacks, and it's even possible to summon a pack of savage wolves to aid your quest. Bosses are also challenging with a wide range of attacks that will punish those who simply try to button-bash their way to success.

Add in a traditional, three-lives-only arcade mode, a wave-based arena section and a special mode we don't want to spoil and *Wulverblade* really is something special.

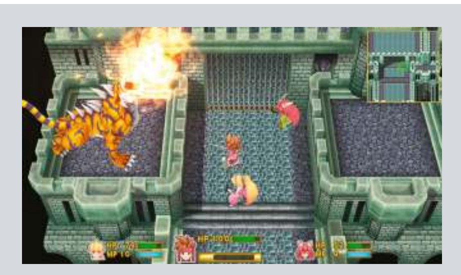
 Score **86%**



» [PS4] *Wulverblade*'s multiplayer is fantastic fun, echoing classics like Final Fight and *Double Dragon*.



» [PS4] *Wulverblade* is an intensely bloody experience, so don't play it if you're squeamish.



Secret Of Mana

» System: PS4 (tested) PS Vita, PC
» Buy it from: Retail, online **» Buy it for:** £32.99

It was never going to live up to the majesty of the original SNES game, but this budget remake is not nearly as bad as you may have heard. Yes, the new polygonal graphics are nowhere near as nice as the original 2D sprites, and yes the new music isn't as lovely to listen to (thankfully the original score is also included) but there's still plenty to enjoy. The gameplay is as solid as before, with a decent inventory system, solid combat and challenging bosses. It's a little more difficult than we remember and we could do without the new cutscenes, but *Mana*'s 25-year-old mechanics shine through. It pales in comparison to *Shadow Of The Colossus*' magnificent update, but this HD update is still worthy of your precious time.

 Score **71%**



Sky Force Reloaded

» System: Switch **» Buy it from:** Online
» Buy it for: £8.99

This started off as a mobile game and it hasn't translated to the Switch as well as we'd have liked. Playing it is a grindy experience as you're required to constantly upgrade your ship in order to make any sort of progress. While the first stage is relatively straightforward, even the weakest enemies start requiring multiple hits on the later levels, meaning you're constantly playing through the earlier stages so you can raise the cash needed to power up your ship. It's a shame that the game couldn't have been overhauled and rebalanced, because *Sky Force* is fun and has lots of good ideas and feels almost RPG-like in some aspects. How annoying then that you've got to play those same early levels over and over and over again.

 Score **63%**



Gate Of Doom

» System: Switch **» Buy it from:** Online
» Buy it for: $7.99

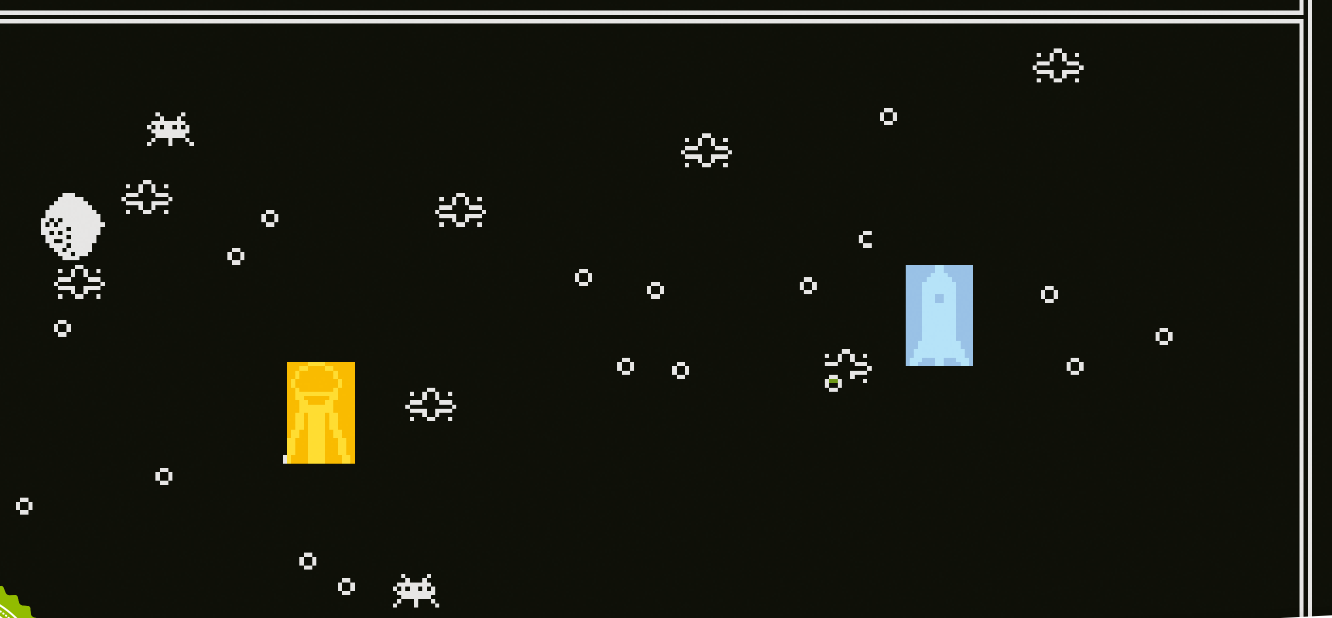
For those of you unfamiliar with *Gate Of Doom*, it's an eight-way beat-'em-up, released by Data East back in 1990. You pick one of four characters, each with different abilities, and beat up everything in sight. Once you've vanquished enough baddies, you can activate powerful spells. It's a fun brawler, and the perspective helps it stand out from the crowd.

Gate Of Doom is also a promising start for the *Johnny Turbo's Arcade* range of retro releases, packing all the options you'd hope for including configurable controls and save states. Although the blurry scaling is a bugbear, an impressive variety of filters is available, offering scanlines and various video connection imitations like composite and RGB.

>> Score **80%**



» [Atari 8-bit] In *Terminated Transmission*, almost nobody can hear you broadcast.



Gaming NEWS

FROM VR TO GAME BOY

The most recent Global Game Jam – where developers are given a theme and mere days to create something – took place at the start of 2018 and there were hundreds of gatherings organised to take place during the event itself as people came together to create and socialise. Although the majority of entries were written with current-generation hardware in mind, pretty much anything goes including board games and baked goods.

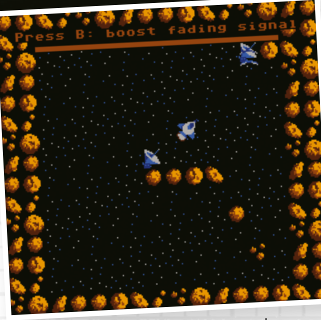
There were titles designed for unusual hardware so the Tiny Arcade – an Arduino-based games system – received the impressive-looking *Killing The Messenger*, Oculus Rift owners with Oculus Touch can have a blast at *Cyber Wave* and *Transmission: Defence* was written around the author's custom-built Bluetooth controller.

We were surprised to see an attempted alternate reality game – where in-game events bleed over into the real world – which the developer claims is "based on light transmission and amplified tools" called *Where Is My Girl?*, and *Oszipong* is a variant on the venerable bat and ball game which runs on an oscilloscope and Teensy microcontroller.

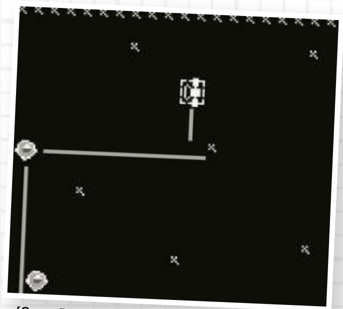
There was a healthy dose of satire throughout; both *Bad Blood* and *Vaxx Challenge* are board games, with players of the former taking the role of companies vying to privatise the NHS and the latter explaining how vaccinations and herd immunity work. The web-based *Fake News – The Game* is a *Cards Against Humanity* style affair where the aim is to make the others laugh with funny news headlines and *Prime Target* sees an Amazon delivery drone's GPS fail, sending it headlong into an enemy war zone.

8-bit computers and consoles fared well from the game jam. *For The Galaxy* on the Game Boy sees the player searching the quadrant for enemy transmissions and trying to disable them. The VIC 20's *Dr Ultra* is a medical simulation of sorts where the player uses paddles to control a powerful ultrasonic laser to cut kidney stones out of their patients – this one comes with a version of *Snake* which was thrown together in a spare hour, just because the programmer could – and finally we have to mention one title on the C64 where the goal is to deliver messages by train for no other reason than the appalling pun title of *Trainsmission*.

Due to the small timescale, there are quite a few entries which should really be considered as previews rather than complete titles but everything shown off can be found behind the link, Kikstart.eu/global-jam-2018.



» [NES] Zooming through space and improving communications in *Intergalactic Transmissing*.



» [Game Boy] Searching for space for any hidden signals in *For The Galaxy*.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **darran.jones@futurenet.com**

HOMEBREW HEROES

Karl Hörnell's back catalogue on the C64 includes Toadforce, Clean Up Service and Fungus; after a few decades away from the breadbin he's returned with Iceblox Plus and we wanted a chat to find out more



***Iceblox Plus* is on a range of devices, but where did the idea for a Commodore 64 conversion come from?**
I happened to find some YouTube videos about 6502 programming, which brought back memories from the good old days. So I decided to look into what kind of development tools were available for the Mac, just out of curiosity at first. This eventually spiralled into the desire to create something challenging.

Iceblox Plus became the natural choice because the gameplay was simple, I had already ported it to a lot of other platforms, and – at least if you consider the 3D perspective – it looked different from nearly every other existing C64 game. That meant it would pretty much have its own niche and not be unfavourably compared to the insanely elaborate platform adventures and horizontally scrolling shoot-'em-ups that people build nowadays.

And how long did it take to convert from Java to 6502 assembly language?
I'm not sure specifically how much time went into the programming. Everything had to be completely redesigned. The whole project, from start to initial release, took just under a month. Since it was only a hobby, I couldn't work full time on it, of course.


» [C64] Penguins do like to be beside the seaside.

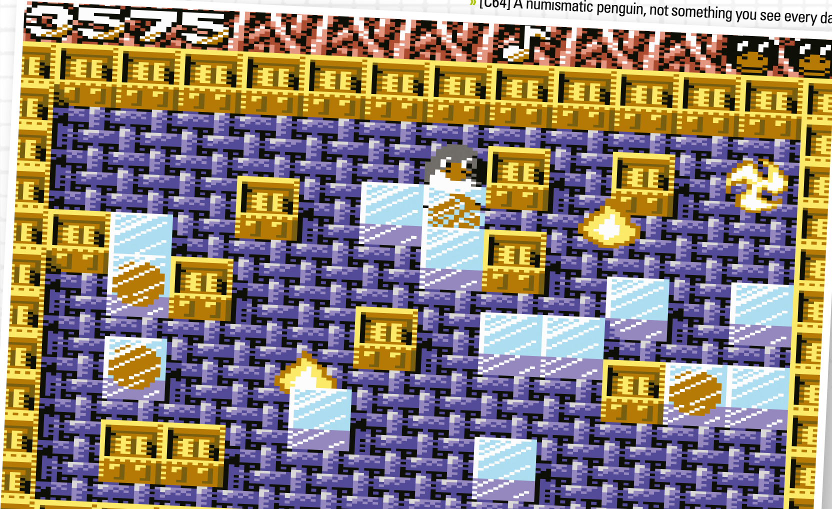
How do the tools available now compare to what you had while writing games in the Eighties?
The coding and debugging tools are infinitely better. Back then I used a primitive assembler that handled just one line at a time, as you typed it in. Editing code wasn't possible, you could only overwrite. Something I miss is my old sprite editor, although it wouldn't have been very useful in this case. The penguin and the ice blocks consist of partly overlapping sprites, and building a new editor flexible enough to handle this would have been too much work for just one game. I had to settle for a Commodore 64-style pixel editor I found online and then convert the result into the proper byte format.

My overall impression is that keeping the code and graphical resources on a real computer, and transferring the resulting program to the C64 – or more accurately an emulator – after compiling, makes the development process a lot less claustrophobic than it used to be.

What kind of feedback have you had so far from C64 gamers in regards to *Iceblox Plus*?
The little direct feedback I've had has been entirely positive. I'm sure there is a play through video somewhere with at least one commenter who thinks the game is garbage, but I haven't bothered looking.

Finally, have you got any future plans our readers might be interested in?
Afraid not. Nothing specific, at least.


» [C64] Crushing the enemy in a land of familiar-looking building blocks.

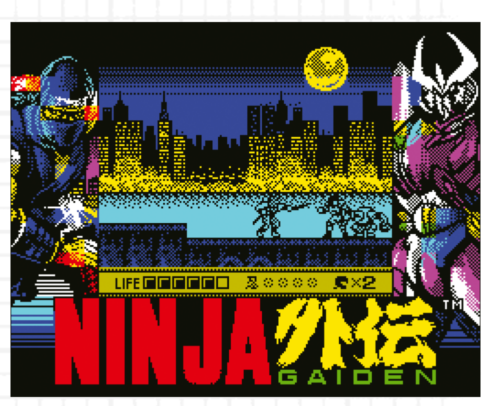

» [C64] A numismatic penguin, not something you see every day.


» [ZX Spectrum] Mike isn't looking quite so mighty at the moment.

MIGHTY FIGHTING

The super-deformed characters of Capcom's *Mighty Final Fight* might look cute, but despite being a comical retelling of the story from big brother *Final Fight*, that scrolling brawler didn't pull its punches and neither does this recently released Spectrum conversion. Players can select their fighter from three characters – martial artists Cody and Guy or former pro wrestler-turned-mayor Mike Haggar – before wading into battle with the intention being to rescue Haggar's daughter Jessica from the villainous Mad Gear Gang. The chibi-styled fight begins at Kikstart.eu/mighty-final-spec.

> "The main play area is a little small but the graphics are reproduced faithfully"

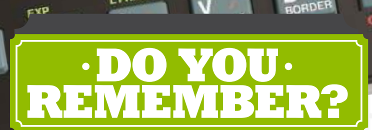


» [ZX Spectrum] A not so stealthy couple of attackers about to be run through.

SHADOWY SWORDPLAY

The Spectrum is doing well for homebrew conversions at the moment. *Ninja Gaiden Shadow Warriors* takes its cues from the similarly titled Game Boy release from Tecmo, a horizontally scrolling action game where the player controls a sword-wielding ninja as he leaps around and skewers enemies.

From what we've seen during a quick play, this does a good job of capturing the gameplay of the original; the main play area is a little small but the graphics are reproduced quite faithfully and with some extra colour. Sneak over to Kikstart.eu/gaiden-shadow-spec.



The well-travelled criminal mastermind Carmen Santiago – who isn't infringing on the trademark for *Carmen Sandiego* in the slightest – and her current gang of thieves have pulled off another daring heist but, due to a bizarre accident, rather than hiding in Europe or America they've ended up in hell. Eternal damnation doesn't mean they've escaped the long arm of the law, however, and the player takes the role of a detective determined to find Carmen at all costs, even if that means being damned himself.

Where In Hell Is Carmen Santiago for the Apple II is a parody, taking some ideas from the *Carmen Sandiego* edutainment titles but not copying them directly, then bringing in *Dante's Inferno* to provide locations and characters. Don't expect to play this without learning something. Have a look at Kikstart.eu/santiago-a2.



» [Apple II] Reading through some of the game's files before going to Hell.



» [Apple II] Cerberus, a three-headed dog who doesn't answer to 'Fluffy'.



Gaming

REVIEWS

» [Windows] Receiving a message from the Upside Down, one character at a time.



STRANGER THINGS

» **PLATFORM:** WINDOWS » **DEVELOPER:** MARIA AND JOSH REICHARD » **DOWNLOAD:** KIKSTART.EU/STRANGER-THINGS-WIN » **PRICE:** FREE

It appears that the Eighties was a bad time for the usually sleepy Indiana town of Hawkins. There were supernatural forces at work, with children mysteriously disappearing, and indeed appearing, too. A scientist at the local government facility was also attacked and that laboratory is where the game begins, although the race against the clock to find and rescue survivors, collect Eggo waffles and use them as weapons to dispose of creatures will take the player through other locations around town along the way.

This puzzle-RPG takes inspiration both from the Netflix show of the same name – as with the programme there are many Eighties references to be discovered – and classic vide games; retro games and *Dungeons & Dragons* both contributed to *Stranger Things*' DNA, and there are also *Sokoban*-style puzzles to deal with here. The world of Hawkins is viewed from above and the player's character remains in the centre of the screen while the stage scrolls around them. Along with the Eggos, there is a map and compass to find which aid navigation, keys to collect which unlock doors and the occasional messages from the Upside Down which act as hints.

In keeping with the setting of the source material and as a nod to one of the characters, the original version of the game engine was written in Microsoft's QBASIC and targets the kind of DOS-based PC which would have been around at that time, although the version we're looking at has been converted to run on Windows machines in order to make it available to a wider audience.

Stranger Things started out as a love letter to the show and a fun father and daughter project for Josh and 12-year-old Maria, but they are hoping that it'll also help to promote science, technology, engineering and mathematics – or STEAM for short – for girls, and that's a fantastic goal to have. Who knows, it might even encourage some of our readers to pick up a programming language and make their own games.

>> Score **82%**





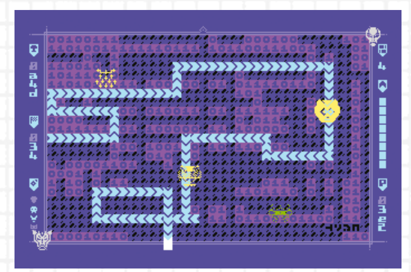
» [Windows] A survivor offers some sound advice as they mysteriously disappear.

Don't forget to follow us online for all the latest retro updates

 RetroGamerUK  @RetroGamer_Mag  darran.jones@futurenet.com

MAH

» **PLATFORM:** COMMODORE 64 » **PRICE:** TBA
» **DEVELOPER:** RETREAM
» **DOWNLOAD:** KIKSTART.EU/MAH-C64

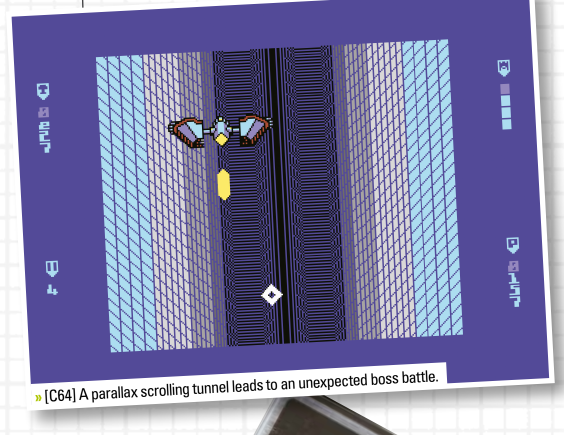


» [C64] Touching the edge of the play area fills in whatever has been drawn.

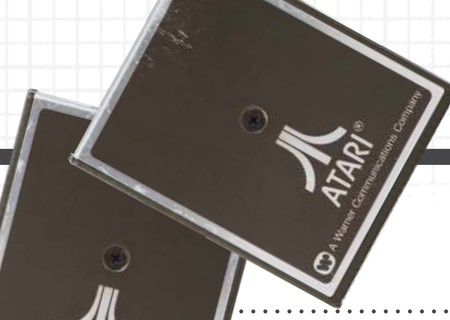
The problem with doomsday weapons is that they can be used by the bad guys. For example, a hatemongering group called the Purifiers want nothing more than to literally watch the world burn and have found the Apocalypser, a device originally built to see off an invasion of Earth. That device is now active and protected from conventional attack by the ApocalypShield, but there might still be enough time to hack in through what feel suspiciously like minigames.

This is a remarkably cryptic game that bombards the player with information without really explaining what's going on and, along with requiring lightning reflexes, there's quite a bit of trial and error needed to understand what to do within each section. That was a deliberate design choice because the author wanted players to discover *MAH* for themselves, but that makes it initially frustrating and possibly not suitable for some players.

 Score **70%**



» [C64] A parallax scrolling tunnel leads to an unexpected boss battle.



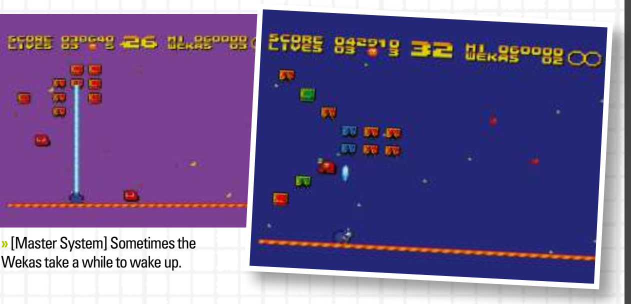
WEKA INVADERS

» **PLATFORM:** SEGA MASTER SYSTEM » **DEVELOPER:** DISJOINTED STUDIO
» **DOWNLOAD:** KIKSTART.EU/WEKA-INVADERS-SMS » **PRICE:** FREE

Invasions from space are commonplace in the world of videogames, but at least the Wekas do things differently. The start of each area sees one of their flying saucers dropping off a cluster of boxes but only some of them contain an enemy, others house weapons which the game's hero Waimanu can use – these include extra bullets, a powerful laser or a 'shake' weapon which takes care of nasties on the ground – and the rest are there to act as camouflage.

Despite the cute graphics and jolly music, *Weka Invaders* is a challenging gallery shooter. Quick reactions are needed so prioritising what to shoot and grabbing the weapon power-ups are wise strategies. Each battle has a strict time limit but it isn't necessary to clear the entire playfield and merely taking down all of the Wekas will end the current stage. It's tempting to go after the other boxes for points as well, though.

>> Score **85%**



» [Master System] Blasting through the boxes using a strong but brief laser power-up.

» [Master System] Sometimes the Wekas take a while to wake up.

ROUNDUP

There's some simple, single-screen action in *Great Green Adventure* for the Atari 8-bit but, despite players having over two hundred lives and no time limit to worry about, this game is seriously hard; touching a single pixel of the background is fatal and sends the green blob back to the start of the stage. Brave adventurers who don't mind some frustration can start their quest behind Kikstart.eu/great-green-a8.

Yvar de Goffau has some history coding for the Atari 2600 but recently decided to see what challenges the original Game Boy could offer. Since he couldn't find what he considered to be a decent implementation of *Snake* – with decent enough graphics, smooth movement and multiple stages – he settled on that as a first project. Kikstart.eu/snake-gb slithers over to the appropriate thread at the NesDev forums.

ICEBLOX PLUS

» **PLATFORM:** COMMODORE 64 » **DEVELOPER:** KARL HÖRNELL » **DOWNLOAD:** KIKSTART.EU/ICEBLOX-PLUS-C64 » **PRICE:** FREE

Pixel Pete is a penguin in search of coins that have become frozen in blocks of ice, and in order to gather all of them within each stage, he'll have to crush the huge cubes between himself and other objects on the screen. There are also fiery enemies which patrol the level and want to frazzle poor Pete, but these can also be crushed by a heartily shoved ice block and some good timing; the nasties active on each stage are shown before it starts and any that are squashed will respawn soon afterwards.

Iceblox Plus is a charming action game with cheerful graphics and sound, but it's also quite challenging when things get going. Waddling hurriedly around while trying to clear each stage as quickly as possible works as a strategy, but as players gain experience they can also consider being more methodical in their ice pushing and play for score.

>> Score **88%**



» [C64] Pete's hoping the fire won't catch up before the last coin is freed.



» [C64] The delightful rural setting which somehow doesn't melt the ice.

MAILBAG

HAVE YOUR SAY… SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**



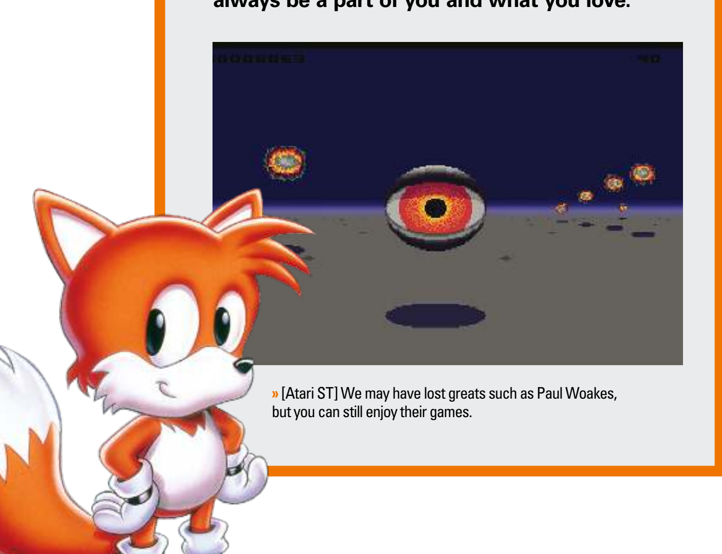
STAR LETTER

DEARLY DEPARTED

Dear **Retro Gamer,**
I'm currently in my mid-fifties and I've been gaming since I've been old enough to hold a joystick. Gaming has given me a tremendous amount of pleasure over the years and it's a journey I've followed since the earliest arcade games and home computers began appearing in the Seventies. I've played probably thousands of games over the last 40 years and gone through lots of different systems, from the ZX81 to the PS3, but now I'm simply content to read magazines like **Retro Gamer** and try new games on the Raspberry Pi my son built for me.

It feels like lately a lot of gaming greats have left us, and it's upsetting to see. I used to adore Bob Wakelin's artwork for Ocean Software and I was in awe of Paul Woakes' work on the Commodore 64. I know their work lives on, but it doesn't make the pain any easier to deal with. You probably think I'm being silly grieving over people I never knew, but I knew their games and their work and it meant the world to me. I hope there are other readers out there that feel the same way as me.
David Giles

We're sure you're not the only person to mourn the loss of gaming legends, we clearly do. As you've already pointed out, the best thing anyone can do in a situation like this is to simply look back and enjoy the legacies that have been left behind. As long as you're still enjoying the games, art and music they'll always be a part of you and what you love.


» [Atari ST] We may have lost greats such as Paul Woakes, but you can still enjoy their games.



» [C16] If we can track down *Tom Thumb*'s coder we'd certainly be up for running a feature.

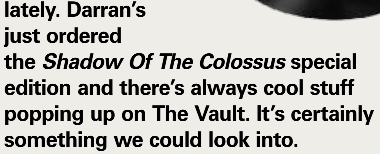
WHERE IS THE LOVE?

Dear **Retro Gamer,**
Why do you never feature interviews with developers that worked on machines like the C16? You had to be incredibly accomplished to get the best out of these systems and I'm sure it would make for fascinating reading. I'd love to hear how *Tom Thumb* was made, for example. Please make this happen.
James Spencer

Thanks for getting in touch James. While we've featured the odd Commodore 16-based article in the past, they don't appear as regularly as we would like, possibly because it's nowhere near as popular as its bigger brother. We'll do some digging around and see what happens for some future issues of the magazine.

VINYL EXPLOSION

Dear **Retro Gamer,**
I've been reading your magazine for several months now and it's helped reignite my love of videogame soundtracks, particularly vinyl-based ones. With so many classic (and modern) videogames having vinyl soundtracks now, surely it's time you did some sort of feature about it. I'd love to learn how specific games or tracks get chosen and the process that companies go through. Do they work with the original artists? Are missing tracks discovered in the curation process? I feel these are important questions that a magazine of **Retro Gamer**'s integrity could easily answer.
Paul Parsons



You're right Paul, there's certainly been a big resurgeance in vinyl releases lately. Darran's just ordered the *Shadow Of The Colossus* special edition and there's always cool stuff popping up on The Vault. It's certainly something we could look into.

TAILSPIN

Hi **Retro Gamer**
In *Sonic 2*, after watching Tails stumble into bomb after bomb in the special stages, do you think Sonic ever got the urge just to leave him there to live out the rest of his life in an extended acid trip?
Scott Tumilty (via Twitter)

Thanks for your question, Scott. It would be rude to not put this conundrum to our resident *Sonic* expert, Nick Thorpe. While Nick can understand your concerns he'd like to point out that if Tails was left in that special stage Sonic would never have an invincible sidekick to throw at Dr Robotnik whenever he needed to.

Don't forget to follow us online for all the latest retro updates

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THE 'RETRO' CONUNDRUM

Dear **Retro Gamer,**

What age of console stops feeling retro? For me it's the PlayStation 2. Even in 20 years I'll never have the nostalgia for that era. It feels like games then became more 'real' and modern looking in that generation.

NinjaPanda (via Twitter)

If we had a pound for every time this question popped up we'd all be living on a remote Pacific island playing four-player *Puyo Puyo Tetris*. The beauty of this particular question is there's no definitive answer. There's no definitive answer because everyone has their own definition of what 'retro' means and it almost always ties in to whatever systems were available to them as kids.



» It might not be retro to some, but it's clear that there's a lot of love in the **Retro Gamer** readership for Sony's monolithic PS2.

The official Retro Gamer rule of thumb has always been around ten years (as that would typically mean two console generations) but we've since extended it to around 15. The PS2 falls squarely into Retro Gamer's remit, along with the Xbox and GameCube.

ANTIQUES ROADSHOW

Hi **Darran**

I'm trying to find someone to appraise my mother's C64. She has it all complete with books and even the original flyer to go with it. The only thing she hasn't got is the box, but she does have Music Maker to go with it, too. I was wondering if you are able to help, as I can't find anyone where I live cause I live in Australia and, it started off over in the UK

Let me know if you need pictures. I'm just looking for a rough year if possible and also to see if there is any value to it (I'm not willing to sell it anyway).

I look forward to hearing from you soon, cheers.

Bobby Fish

» C64 prices can fluctuate wildly. You'll be lucky to get one for under £50.

The Commodore 64 was released in 1982 and became a huge success for Commodore, selling over 30 million units and earning a place in the 2002 Guinness World Records book. While we're not too sure on prices for the machine across the globe in Australia, the going rate for an unboxed Commodore 64 in the UK is around the £50 price point – depending on what's included with it, of course.



From the forum

Every month, **Retro Gamer** asks a question on the forum and prints the best replies. This month we wanted to know…

Your favourite Pac-Man game/memories

Dan Tootill
Pac-Man on the Atari 2600. Had a proper gaming night at my grandparent's house, probably sometime in 1984. We loved it, they loved it… even my mum loved it.

Carlos Dean
Blackpool Pleasure Beach, the original arcade version. Amaze balls.

John Reynolds
My first *Pac-Man* memory was seeing it on a neighbour's Atari 2600 when I was about six or seven. It was the first time I'd seen a home console and I just remember being amazed at the fact that something on the television was being controlled by this boy with a joystick – I didn't have a go myself. A couple of years later I got *Gnasher* for the ZX Spectrum, which I thought looked more authentic than the 'official' Atari game.

Steven Leicester
Pac-Man has always been an amazingly playable game from day one, but the *Championship Edition* on the Xbox 360 really breathed new life into an already timeless classic.

Faber Fox
First time I saw it was on the arcades. My most-loved conversion was CIA's *Pac-Man* for the C64, in which you had to turn your monitor sideways, but was amazingly accurate. Now I'm in love with *Pac-Man 256*, and also like *Championship DX* quite a lot.

David Birdsall
Pac-Man is actually my first gaming memory. I'm not sure of the year, but it must have been 1981 or 1982. I was six or seven, my dad took me into a pub and there was a tabletop *Pac-Man*. I was transfixed, I sat watching the machine play itself for ages. I am pretty sure that before seeing it I had know idea such a thing existed. Been hooked ever since.

Dale Muir
Pac-Man on the 2600 was one of the first two games I ever played when I was six in 1991. I know it's generally considered to be a horrible port, but I have fond memories of it. I also have a Pac-Man plushie that I received around the same time!

Mark R Jones
Pac-Man was one of the first games that I saw in an arcade. I had a few goes at it, but I was rubbish. Me and my sisters did go mad on the *Pac-Man* stickers and scratch cards and bought loads of them from the newsagents five doors up from our house.

retro GAMER

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Printed by
Wyndham Bicester, Gravnville Way, Bicester, OX26 4QZ

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU www.marketforce.co.uk Tel: 0203 787 9060

ISSN 1742-3155

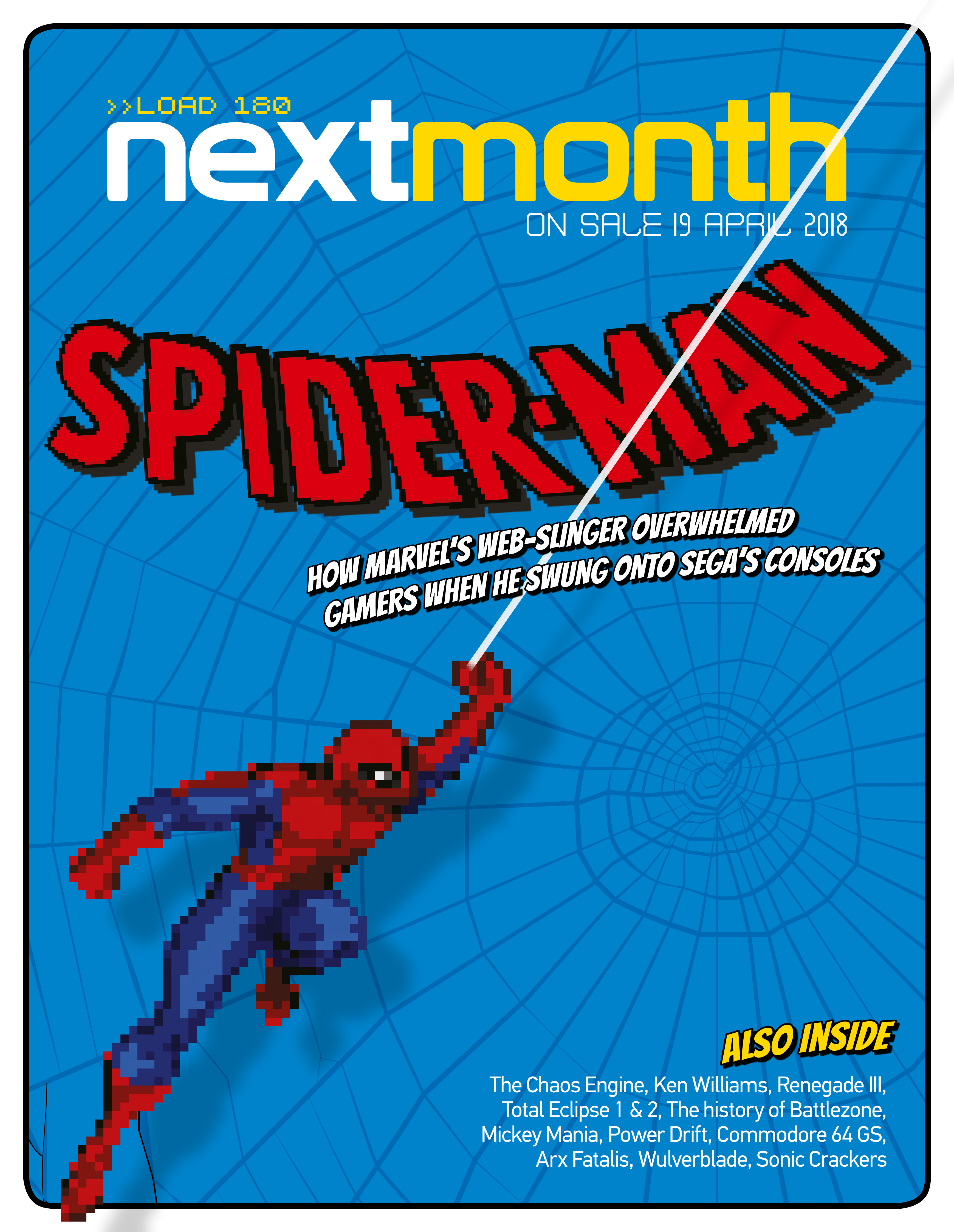
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Future plc is a public company quoted on the London Stock Exchange (symbol: FUTR)
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Manx TT SuperBike

GO 3D, TAKE BACK CONTROL

» RETROREVIVAL

NT

» SATURN » 1997 » TANTALUS INTERACTIVE

I've always wanted to like the Saturn conversion of *Manx TT*. Sega's arcade racers often struggled to transition well to the system, with *Virtua Racing*, *Daytona USA* and *Sega Touring Car Championship* all being a bit sub-par. Tantalus pulled off a bit of a miracle with *Manx TT* though, as the Australian team managed to strike the balance between attractive 3D models, a decent draw distance and a stable framerate. While it's not *Sega Rally*, it's still got the makings of a fine racer.

The only major problem with *Manx TT* is how it controls. On a default digital pad, your bike is wildly oversensitive, to the point where it feels as though you are magnetically attracted to walls. Zigzagging from one side of the road to the other, you're only saved from plunging into the Irish Sea by trackside barriers. It is enormously frustrating to say the least, and massively impacts upon what should be one of the Saturn's most enjoyable racing games.

However, not long before Christmas I picked up a 3D Controller – the dish-shaped analogue pad that was designed for *NiGHTS Into Dreams*. It's compatible with *Manx TT*, and it completely transforms the game. Suddenly it's possible to take corners gracefully, and my racer spends less time banging into things and more time winning races. For the first time ever, I've been able to enjoy the Saturn version of *Manx TT* rather than feeling like I was constantly fighting against it. If only all control issues were solved so easily. *


COURSE MAP
SHIFT
6
148
MPH
SPEED

ENDGAME



THE MAGICAL QUEST STARRING MICKEY MOUSE

» When a game of catch goes horribly awry, Mickey Mouse finds himself lost in a magical kingdom, where his pal Pluto has been kidnapped. An adventure is clearly in order, so armed only with a selection of ability-granting costumes, Disney's most recognisable character heads off to liberate his buddy and show Pete defeat. Let's skip to the end and find out whether our rodent chum is successful in his endeavour…



01

» Mickey has defeated the evil sorcerer Pete and rescued Pluto. Now he wants to go home, which is a pretty reasonable idea and a standard course of action at the conclusion of a cutesy licensed platformer. Off he goes then…



02

» We rejoin Mickey and Pluto at home some time later, with Donald excitedly asking the pair to join him for a game of catch. Wait… Just to confirm this, we *have* skipped some time to reach this happy aftermath, right?



03

» Oh heck, we haven't done that at all. Capcom has just written the events of the game off as being a dream, the cheapest, laziest story conclusion known to humankind. They teach you not to do this at primary school, guys.



04

» Mickey stops to ponder the nature of dreams. After all, what is reality but a set of stimuli processed by your mind? The events of REM sleep may not have happened, but they were experienced as though they had, and besides, fictional events often have real social impact. Donald just wants him to hurry up.



05

» Mickey obliges, while the player is left to contemplate the experience of Mickey's dream. The journey is more important than the destination, after all – so is there some profound philosophical insight to be gained from *The Magical Quest*? No, there is not. It just has a really disappointing ending.